

SEQUENCE LISTING

<110> Ludwig Institute for Cancer Research
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Tureci, Ozlem
Sahin, Ugur

<120> CANCER-ASSOCIATED NUCLEIC ACIDS AND
POLYPEPTIDES

<130> L0461/7039/JRV/ERG

<140> Unknown

<141> 1998-07-15

<150> U.S. 08/896,164

<151> 1997-07-17

<150> U.S. 60/061,599

<151> 1997-10-10

<150> U.S. 60/061,765

<151> 1997-10-10

<150> U.S. 08/948,705

<151> 1997-10-10

<150> U.S. SNU (LUD5506.1)

<151> 1998-06-22

<150> U.K. 9721697.2

<151> 1997-10-11

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<213> Homo Sapiens

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<213> Homo Sapiens

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<211> 731

<212> DNA

<213> Homo Sapiens

<400> 17

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<212> DNA
<213> Homo Sapiens

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<211> 1106
<212> DNA
<213> Homo Sapiens

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 <211> 484
 <212> DNA
 <213> Homo Sapiens

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<210> 21
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 <212> DNA
 <213> Homo Sapiens

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<210> 22
 <211> 1070
 <212> DNA
 <213> Homo Sapiens

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<210> 23

<211> 861
 <212> DNA
 <213> Homo Sapiens

<400> 23

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 <212> DNA
 <213> Homo Sapiens

<400> 24

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<210> 25
 <211> 545
 <212> DNA
 <213> Homo Sapiens

<400> 25

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<211> 374

<212> DNA

<213> Homo Sapiens

<400> 26

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<210> 27

<211> 552

<212> DNA

<213> Homo Sapiens

<400> 27

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<210> 28

<211> 502

<212> DNA

<213> Homo Sapiens

<400> 28

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<211> 537
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<400> 29

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<210> 30
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 <212> DNA
 <213> Homo Sapiens

<400> 30

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aatttgcaaa	aagtcaagaa	cangttcatc	tctgaagga	gcacgtttgc	aanaaaccca	1980
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cgaactgaaa	attgtgcntt	tgggttcang	gngaacaaga	nngcttnccn	gaaaacgggg	2100
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gtcaaacgnt	aggnagtgtt	nataaaacca	atttttctaa	nttggtgntc	atttggttga	3840
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<210> 31

<211> 655

<212> DNA

<213> Homo Sapiens

<400> 31

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aaaacctaa	tctgtgggtg	caccgccagg	tgctcctaag	aaagagcatg	taaatgtagt	180
attcattggg	cacgtanatg	ctggcaagtc	aaccattgga	ggacaaataa	tgtatttgac	240
tggaatgggt	gacaaaagga	cgcttgaaaa	gtatgaaaga	gaagctaaag	agaaaaacag	300
agaaacttgg	tacttgtctt	gggccttaga	cacaaatcag	gaagaacgag	acaagggtaa	360
aacagtagaa	gtgggtcgtg	cctattttga	aaccgaaaag	aacatttcac	aattctagat	420
atgaatccca	gaacactgag	ctcaaaaacc	aaagcccaga	atttgaagct	caaagtccn	480
aattccanga	aggtgcggag	atgcttctga	accccgagga	aaagatcctt	tgaatatctc	540
cgtaggagtt	caccccctgg	actccttcac	tcaggggttt	ggggagcacc	cacaggggac	600
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<210> 32

<211> 466

<212> DNA

<213> Homo Sapiens

<400> 32

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accttctga	agacctgtc	gcacactgca	tcccttgcag	tcagttccag	ctcgtgccga	180
attcggaag	agctcgtgcc	gaattcggca	cgagggaagc	actactccca	gcgctgggccc	240
caggaggacc	tgctggagga	gcagaaggat	ggggcccg	cagcggtgt	ggctgacaag	300
aagaaaggcc	tcatggggcc	actgaccgaa	ctggacacta	aagatgtgga	tgccctgtctg	360
aagaagtctg	aggcccagca	tgaacagccg	gaagatggat	gcccctttgg	tgccctgacg	420
cagcgctcc	tgaggccct	ggtggaggaa	aatattattt	tttccc		466

<210> 33

<211> 293

<212> DNA

<213> Homo Sapiens

<400> 33

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acagatgatg	ctgaatagcc	cgctgtttac	tgcaaactct	cagctgcagg	agcagatgcg	120
gccacagctc	ccagccttcc	tgacgagat	gcagaatcca	gacacactat	cagccatgtc	180
aaacccaaga	gcaatgcagg	ctttaatgca	gatccagcag	gggctacaga	cattagccac	240
tgaagcacct	ggcctgattc	cgagcttcac	tccaggtgtg	ggggtggggn	tct	293

<210> 34

<211> 456

<212> DNA

<213> Homo Sapiens

<400> 34

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cttcccatgc	tagtctctgt	aaaacgcaaa	aagccatttt	caggagcagt	aggcaagtca	120
cattcaattg	aaatgcagga	tggtgcactg	ccattccaag	ttccatcttc	ctggcagatc	180
agcacagggt	tccccagaag	ttcatatcct	ggattacagg	tgtatgaaac	catggtacca	240
tacagaaagt	ttgatgaatg	tgtagcagga	gactcctttg	tattttccca	ggtttttagcc	300
actgctccca	aatgataagg	agggtgagga	gtcacatatg	gaacttccat	catgtcgtct	360
tcttgctcaa	aatatccctg	gtcatctttg	agtttagtac	agtctccaaa	atctatatga	420
ggagggaggc	cacagtctat	tggcatacca	aatttt			456

<210> 35

<211> 679

<212> DNA

<213> Homo Sapiens

<400> 35

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agcaatgaga	gccagtcaga	aggactttga	aaattcaata	aatcaagtga	aactcttgaa	120
aaaggatcca	ggaaacgaag	tgaagctaaa	actctacgag	ctatataagc	aggccactga	180
aggaccttgt	aacatgcccc	aaccagggtgt	atttgacttg	atcaacaagg	ccaaatggga	240
cgcattggaat	gcccttggca	gcctgccccaa	ggaagctgcc	aggcagaact	atgtggattt	300
ggtgtccagt	ttgagtcctt	catttggaatc	ctctagtcag	gtggagcctg	gaacagacag	360
gaaatcaact	gggtttgaaa	ctctggtggt	gacctccgaa	gatggcatca	caaagatcat	420
gttcaaccgg	cccaaaaaga	aaaatgccat	aaacactgag	atgtatcatg	aaattatgcg	480
tgactttaaa	gctgccagca	aggatgactc	aatcatcact	gttttaacag	gaaatgggtga	540
ctattacagt	agtgggaatg	atctgactaa	cttcaactgat	attccccctg	gtggagtana	600
ggagaaagct	aaaaataatg	ccgtttttact	gaagggaatt	tgtgggctgt	tttatagaat	660
ttcctaagcc	tctgattgc					679

<210> 36
 <211> 689
 <212> DNA
 <213> Homo Sapiens

<400> 36
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 gaaaatgatg aattctatgc taataatatg tacctgaact ttgctgagat tggtagcaat 180
 ataaagaatc tcatggaaga ttttcagaag aagaaaccaa aagaacagca aaaactagaa 240
 tcaatagcag acatgaaggc gtttgttgag aattatccac agttcaagaa aatgtctggg 300
 actgtttcaa agcatgtgac agtggttgga gaactgtctc gattggtcag tgaacggaat 360
 ctgctggagg tttcagaggt tgagcaagaa ctggcctgtc aaaatgacca ttctagtgtc 420
 ctccagaata taaaaaggct tctgcagaac cccaaagtga cagagtttga tgctgcccgc 480
 ctggtgatgc tttatgtctt acattatgag cgacacagca gcaatagcct gccaggacta 540
 atgatggnc ttaggaataa aggtgtttct gagaagtatc gaaagctcgt gtctgcagtt 600
 gttgaatatg gtggtaaaac gagtcagagg aagtgaacct ctcagcccca aagatgtgtg 660
 tggctatcac caacaattc ctcaaaggg 689

<210> 37
 <211> 443
 <212> DNA
 <213> Homo Sapiens

<400> 37
 ccacgcccgg ccccgaggca ggcttttacg catgccccgc gcgccccctt gtgtccggaa 60
 tttattcctt ccggtgggtt cgcggtctag ctgaccaaga acggaactgg ggactttcgc 120
 agtgagagtt acagctctta aagatggcac cgaccaggc cggcgcggtt ggctcaggcc 180
 tgcaatccca gcactttggg aggcggaggc aggtgaatca cgaggtcagg aaatcgagac 240
 catcctggct aacatggtga aaccccgtct cactaaaaa tacaaaaaat tagccaggca 300
 tgggtggctg cacctgtagt cccagctact tgggaggctg agccaggaaa gtggcatgaa 360
 cccgcgaggc agagcttgca ataagccgag atcgtgccaa tgcactccag cctgggcaac 420
 agaaggagac actgtctcaa aaa 443

<210> 38
 <211> 442
 <212> DNA
 <213> Homo Sapiens

<400> 38
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 acattttctga tgctcttagt gagcgggata aagtaaaatt cactgttcac acaaagattc 180
 caccagcacc accaagacct gattttgatg cttcaaggga aaaactacag aagcttgggtg 240
 aaggagaagg gtcaatgacg aaggaagaat tcacaaagat gaaacaggaa ctggaagctg 300
 aatatttggc aatattcaag aagacagttg cgatgcatga agtggtcctg tgcgtgtgg 360
 cagcacatcc tattttgaga agagatttaa atttccatgt cttcttgga tataatcaag 420
 atttgagtgt gcgaggaaaa aa 442

<210> 39
 <211> 692
 <212> DNA
 <213> Homo Sapiens

<400> 39

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cagtgtgggt ctgtctaacc aaagggcatt ggcctcaaac cctgcatttg gtttaggggc      180
taacagagct cctcagataa tcttcacaca catgtaactg ctggagatct tattctatta      240
tgaataagaa acgagaagtt tttccaaagt gttagtcagg atctgaaggc tgtcattcag      300
ataaccagc ttttcctttt ggcttttagc ccattcagac tttgccagag tcaagccaag      360
gattgctttt ttgctacagt tttctgcaa atggcctagt tcttgagtac ctggaaacca      420
gagagaaaga ggatccagga tgtacttgga tgaggaggcc tggcttatct aggaagtcgt      480
gtctgggggtg cttattgctg ctccatacag ctgtacgtca gccccttggc cttctctgta      540
ggttcttggc ancaatgagc agctttcact caagtgcacac aagtaattac tgagtccaa      600
tttgatagcc accaactgta cctgggtang caaagtcaga tttttgagaa nctttttcct      660
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<210> 40

<211> 619

<212> DNA

<213> Homo Sapiens

<400> 40

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ccatttcagg agccactgga ggctgacagg acctcggaag agctgacaga ggccaagacc      180
ccaacctcca gccagagaa gccacaggaa ctgcgttacag ctgaggttgc agctccatcc      240
acctcatctt cagccacttc ctgcctgag ggtccttcac ctgcccagacc tctcggcgt      300
cgcaccagtg ctgatgtgga aattaggggt caagggactg gtcggccagg acaaccacca      360
ggcccaaaag tgcttcgaaa gctgccagga cggctggtaa ctgtggtaga ggaaaaggaa      420
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tgagactagt gccagcccg gaagcccgtc tgcgcgcagc atgtcanggc canaatcctc      540
ccctccatt ggtgggccct gtgaaagctg ctccttcac cncactgcnc actccancc      600
agnagccctt cattgcncg                                     619

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<210> 41

<211> 153

<212> PRT

<213> Homo Sapiens

<400> 41

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Pro Glu Ser Lys Pro Ile Met Thr Ser Ser Glu Ala Phe Glu Pro Pro
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Lys Tyr Leu Met Leu Gly Gln Gln Ala Val Gly Gly Val Pro Ile Gln
20     25     30
Pro Ser Val Arg Thr Gln Met Trp Leu Thr Glu Gln Leu Arg Thr Asn
35     40     45
Pro Leu Glu Gly Arg Asn Thr Glu Asp Ser Tyr Ser Leu Ala Pro Trp
50     55     60
Gln Gln Gln Gln Ile Glu Phe Arg Gln Gly Ser Glu Thr Pro Met Gln
65     70     75     80
Val Leu Thr Gly Ser Ser Arg Gln Ser Tyr Ser Pro Gly Tyr Gln Asp
85     90     95
Phe Ser Lys Trp Glu Ser Met Leu Lys Lys Glu Gly Leu Leu Arg Gln
100    105    110
Lys Glu Ile Val Asp Arg Gln Lys Gln Ile Thr His Leu Ile Arg Asp
115    120    125
Asn Glu Leu Pro Ala His Ala Met Leu Gly His Tyr Val Asn Cys Glu
130    135    140

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Asp Ser Tyr Val Ala Ser Leu His His
145 150

<210> 42
<211> 95
<212> PRT
<213> Homo Sapiens

<400> 42
Ile Leu Leu Glu Phe Tyr Leu Trp Gln Ile Gly Arg Tyr Ile Phe Val
1 5 10 15
His Val Asn Asn His Ile Tyr Ile Lys Leu Tyr Asn Cys Thr Phe Leu
20 25 30
Thr Ala Leu Ser Gln Val Ala Leu Ser Phe Pro Ser Ile Asn Gly Leu
35 40 45
Ile Phe Val Ser Phe Ala Phe Phe Arg Val Val Asn Ser Tyr Cys Pro
50 55 60
Leu Gln Phe Val Gln Phe Leu Arg Cys Leu Leu Leu Leu Lys Arg Met
65 70 75 80
Leu Gly Glu Phe Ile Phe His Lys Glu Met Glu His Tyr Leu Lys
85 90 95

<210> 43
<211> 114
<212> PRT
<213> Homo Sapiens

<400> 43
Ser Lys Leu Leu Leu Ser Gly Thr Ala Asp Gly Ala Asp Leu Arg Thr
1 5 10 15
Val Asp Pro Glu Thr Gln Ala Arg Leu Glu Ala Leu Leu Glu Ala Ala
20 25 30
Gly Ile Gly Lys Leu Ser Thr Ala Asp Gly Lys Ala Phe Ala Asp Pro
35 40 45
Glu Val Leu Arg Arg Leu Thr Ser Ser Val Ser Cys Ala Leu Asp Glu
50 55 60
Ala Ala Ala Leu Thr Arg Met Arg Ala Glu Ser Thr Ala Asn Ala Gly
65 70 75 80
Gln Ser Asp Asn Arg Ser Leu Ala Glu Ala Cys Ser Gly Asp Val Ala
85 90 95
Val Arg Lys Leu Leu Ile Glu Gly Arg Ser Val Phe Glu Leu Pro Glu
100 105 110
Glu Gly

<210> 44
<211> 132
<212> PRT
<213> Homo Sapiens

<400> 44
Gly Glu Lys Glu Gln Asp Lys Pro Pro Asn Leu Val Leu Lys Asp Lys
1 5 10 15
Val Lys Pro Lys Gln Asp Thr Lys Tyr Asp Leu Ile Leu Asp Glu Gln
20 25 30

Ala Glu Asp Ser Lys Ser Ser His Ser His Thr Ser Lys His Lys Lys
 35 40 45
 Lys Thr His His Cys Ser Glu Glu Lys Glu Asp Glu Asp Tyr Met Pro
 50 55 60
 Ile Lys Asn Thr Asn Gln Asp Ile Tyr Arg Glu Met Gly Phe Gly His
 65 70 75 80
 Tyr Glu Glu Glu Glu Ser Cys Trp Glu Lys Gln Lys Ser Glu Lys Arg
 85 90 95
 Asp Arg Thr Gln Asn Arg Ser Arg Ser Arg Ser Arg Glu Arg Asp Gly
 100 105 110
 His Tyr Ser Asn Ser His Lys Ser Lys Tyr Gln Thr Asp Leu Tyr Glu
 115 120 125
 Arg Glu Arg Ser
 130

<210> 45
 <211> 214
 <212> PRT
 <213> Homo Sapiens

<400> 45
 Lys Thr Gln Glu Lys Pro Pro Lys Glu Leu Val Asn Glu Trp Ser Leu
 1 5 10 15
 Lys Ile Arg Lys Glu Met Arg Val Val Asp Arg Gln Ile Arg Asp Ile
 20 25 30
 Gln Arg Glu Glu Glu Lys Val Lys Arg Ser Val Lys Asp Ala Ala Lys
 35 40 45
 Lys Gly Gln Lys Asp Val Cys Ile Val Leu Ala Lys Glu Met Ile Arg
 50 55 60
 Ser Arg Lys Ala Val Ser Lys Leu Ala Ser Lys Ala His Met Asn Ser
 65 70 75 80
 Val Leu Met Gly Met Lys Asn Gln Leu Ala Val Leu Arg Val Ala Gly
 85 90 95
 Ser Leu Gln Lys Ser Thr Glu Val Met Lys Ala Met Gln Ser Leu Val
 100 105 110
 Lys Ile Pro Glu Ile Gln Ala Thr Met Arg Glu Leu Ser Lys Glu Met
 115 120 125
 Met Lys Ala Gly Ile Ile Glu Met Leu Glu Asp Thr Phe Glu Ser
 130 135 140
 Met Asp Asp Gln Glu Glu Met Glu Glu Glu Ala Glu Met Glu Ile Asp
 145 150 155 160
 Arg Ile Leu Phe Glu Ile Thr Ala Gly Ala Leu Gly Lys Ala Pro Ser
 165 170 175
 Lys Val Thr Asp Ala Leu Pro Glu Pro Glu Pro Pro Gly Ala Met Ala
 180 185 190
 Ala Ser Glu Asp Glu Glu Glu Glu Glu Glu Leu Glu Ala Met Gln Ser
 195 200 205
 Arg Leu Ala Thr Arg Ser
 210

<210> 46
 <211> 248
 <212> PRT
 <213> Homo Sapiens

<400> 46

Gly	Ser	Arg	Glu	Thr	Leu	Ala	Phe	Val	Pro	Leu	Leu	Arg	Leu	Leu
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Glu	Ala	Thr	Leu	Ser	Pro	Gly	Arg	Ala	Phe	Cys	Ser	Pro	Ile	Ser
			20					25					30	Ser
Lys	Ile	Gln	Pro	Ala	Gln	Val	Ala	Gly	His	Glu	Leu	Cys	Ser	Gly
		35					40					45		Ser
Trp	Asn	Leu	Thr	Leu	Val	Ala	Ser	Gly	Pro	Val	Ser	Met	Ala	Ala
	50					55					60			Glu
His	Leu	Leu	Pro	Gly	Pro	Pro	Pro	Ser	Leu	Ala	Asp	Phe	Leu	Glu
65					70					75				80
Gly	Gly	Lys	Gly	Thr	Glu	Arg	Gly	Ser	Gly	Ser	Ser	Lys	Pro	Thr
				85					90					95
Ser	Ser	Gly	Gly	Pro	Arg	Met	Ala	Ser	Phe	Pro	Lys	Thr	Lys	Phe
			100					105					110	Asn
Glu	Tyr	Lys	Asp	Val	Leu	Pro	Cys	Met	Thr	Ser	Ser	Arg	Gly	Gly
	115						120					125		Lys
Ile	Lys	Ala	Thr	Asp	Phe	Met	Val	Ala	Met	Arg	Cys	Leu	Gly	Ala
	130					135					140			Ser
Pro	Thr	Pro	Gly	Glu	Val	Gln	Arg	His	Leu	Gln	Thr	His	Gly	Ile
145					150					155				160
Gly	Asn	Gly	Glu	Leu	Asp	Phe	Ser	Thr	Phe	Leu	Thr	Ile	Met	His
				165					170				175	Met
Gln	Ile	Lys	Gln	Glu	Asp	Pro	Lys	Lys	Glu	Ile	Leu	Leu	Ala	Met
			180					185					190	Leu
Met	Val	Asp	Lys	Glu	Lys	Lys	Gly	Tyr	Val	Met	Ala	Ser	Asp	Leu
	195						200					205		Arg
Ser	Lys	Leu	Thr	Ser	Gly	Glu	Lys	Leu	Thr	His	Lys	Glu	Val	Asp
	210					215					220			Asp
Leu	Phe	Arg	Glu	Ala	Asp	Ile	Glu	Pro	Asn	Gly	Lys	Val	Lys	Tyr
225					230					235				240
Glu	Phe	Ile	His	Lys	Ile	Thr	Leu							
				245										

<210> 47

<211> 177

<212> PRT

<213> Homo Sapiens

<400> 47

Leu	Cys	Cys	Met	His	Tyr	Cys	Cys	Lys	Ser	Cys	Trp	Asn	Glu	Tyr
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Thr	Thr	Arg	Ile	Glu	Gln	Asn	Leu	Val	Leu	Asn	Cys	Thr	Cys	Pro
			20					25					30	Ile
Ala	Asp	Cys	Pro	Ala	Gln	Pro	Thr	Gly	Ala	Phe	Ile	Arg	Ala	Ile
		35					40					45		Val
Ser	Ser	Pro	Glu	Val	Ile	Ser	Lys	Tyr	Lys	Ala	Leu	Leu	Arg	Gly
	50					55				60				Tyr
Val	Glu	Ser	Cys	Ser	Asn	Leu	Thr	Trp	Cys	Thr	Asn	Pro	Gln	Gly
65					70					75				80
Asp	Arg	Ile	Leu	Cys	Arg	Gln	Gly	Leu	Gly	Cys	Gly	Thr	Thr	Cys
				85					90				95	Ser
Lys	Cys	Gly	Trp	Ala	Ser	Cys	Phe	Asn	Cys	Ser	Phe	Pro	Glu	Ala
			100					105					110	His
Tyr	Pro	Ala	Ser	Cys	Gly	His	Met	Ser	Gln	Trp	Val	Asp	Asp	Gly
														Gly

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<210> 48
<211> 102
<212> PRT
<213> Homo Sapiens
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<210> 49
<211> 179
<212> PRT
<213> Homo Sapiens
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-20-

[illegible]

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<210> 50
<211> 163
<212> PRT
<213> Homo Sapiens
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[illegible]

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<210> 51
<211> 164
<212> PRT
<213> Homo Sapiens
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<400> 51															
Phe	Gly	Asp	Ser	Val	Asp	Cys	Ser	Asp	Cys	Trp	Leu	Pro	Val	Val	Lys
1				5					10					15	
Phe	Ile	Glu	Glu	Gln	Phe	Glu	Gln	Tyr	Leu	Arg	Asp	Glu	Ser	Gly	Leu
			20					25						30	
Asn	Arg	Lys	Asn	Ile	Gln	Asp	Ser	Arg	Val	His	Cys	Cys	Leu	Tyr	Phe
		35					40					45			
Ile	Ser	Pro	Phe	Gly	Arg	Gly	Leu	Arg	Pro	Leu	Ala	Phe	Leu	Arg	Ala
	50					55					60				
Val	His	Lys	Val	Asn	Ile	Ile	Pro	Val	Ile	Gly	Lys	Ala	Asp	Ala	Leu
65				70						75					80
Met	Pro	Gln	Glu	Thr	Gln	Ala	Leu	Lys	Gln	Lys	Ile	Arg	Asp	Gln	Leu
				85					90					95	
Lys	Glu	Glu	Glu	Ile	His	Ile	Tyr	Gln	Phe	Pro	Glu	Cys	Asp	Ser	Asp

			100					105					110				
Glu	Asp	Glu	Asp	Phe	Lys	Arg	Gln	Asp	Ala	Met	Lys	Glu	Ser	Ile	Pro		
		115					120					125					
Phe	Ala	Val	Val	Gly	Ser	Cys	Gln	Val	Val	Arg	Asp	Gly	Gly	Asn	Arg		
	130					135					140						
Pro	Val	Arg	Gly	Arg	Arg	Tyr	Ser	Trp	Gly	Asn	Val	Glu	Val	Asn	His		
145					150					155					160		
Ile	Ala	Ile	Ser														

<210> 52
 <211> 600
 <212> PRT
 <213> Homo Sapiens

<400> 52

Met	Cys	Pro	Arg	Gln	Val	Asp	Arg	Ala	Lys	Glu	Lys	Gly	Ile	Gly	Thr		
1				5					10					15			
Pro	Gln	Pro	Asp	Val	Ala	Lys	Asp	Ser	Trp	Ala	Glu	Leu	Glu	Asn	Ser		
			20				25						30				
Ser	Lys	Glu	Asn	Glu	Val	Ile	Glu	Val	Lys	Ser	Met	Gly	Glu	Ser	Gln		
		35					40					45					
Ser	Lys	Lys	Leu	Gln	Gly	Gly	Tyr	Glu	Cys	Lys	Tyr	Cys	Pro	Tyr	Ser		
	50					55					60						
Thr	Gln	Asn	Leu	Asn	Glu	Phe	Thr	Glu	His	Val	Asp	Met	Gln	His	Pro		
65					70					75					80		
Asn	Val	Ile	Leu	Asn	Pro	Leu	Tyr	Val	Cys	Ala	Glu	Cys	Asn	Phe	Thr		
				85					90					95			
Thr	Lys	Lys	Tyr	Asp	Ser	Leu	Ser	Asp	His	Asn	Ser	Lys	Phe	His	Pro		
			100					105					110				
Gly	Glu	Ala	Asn	Phe	Lys	Leu	Lys	Leu	Ile	Lys	Arg	Asn	Asn	Gln	Thr		
	115						120					125					
Val	Leu	Glu	Gln	Ser	Ile	Glu	Thr	Thr	Asn	His	Val	Val	Ser	Ile	Thr		
	130					135						140					
Thr	Ser	Gly	Pro	Gly	Thr	Gly	Asp	Ser	Asp	Ser	Gly	Ile	Ser	Val	Ser		
145					150					155					160		
Lys	Thr	Pro	Ile	Met	Lys	Pro	Gly	Lys	Pro	Lys	Ala	Asp	Ala	Lys	Lys		
				165					170					175			
Val	Pro	Lys	Lys	Pro	Glu	Glu	Ile	Thr	Pro	Glu	Asn	His	Val	Glu	Gly		
			180					185					190				
Thr	Ala	Arg	Leu	Val	Thr	Asp	Thr	Ala	Glu	Ile	Leu	Ser	Arg	Leu	Gly		
		195					200						205				
Gly	Val	Glu	Leu	Leu	Gln	Asp	Thr	Leu	Gly	His	Val	Met	Pro	Ser	Val		
	210					215						220					
Gln	Leu	Pro	Pro	Asn	Ile	Asn	Leu	Val	Pro	Lys	Val	Pro	Val	Pro	Leu		
225					230					235					240		
Asn	Thr	Thr	Lys	Tyr	Asn	Ser	Ala	Leu	Asp	Thr	Asn	Ala	Thr	Met	Ile		
				245					250					255			
Asn	Ser	Phe	Asn	Lys	Phe	Pro	Tyr	Pro	Thr	Gln	Ala	Glu	Leu	Ser	Trp		
			260					265					270				
Leu	Thr	Ala	Ala	Ser	Lys	His	Pro	Glu	Glu	His	Ile	Arg	Ile	Trp	Phe		
		275					280					285					
Ala	Thr	Gln	Arg	Leu	Lys	His	Gly	Ile	Ser	Trp	Ser	Pro	Glu	Glu	Val		
	290					295					300						
Glu	Glu	Ala	Arg	Lys	Lys	Met	Phe	Asn	Gly	Thr	Ile	Gln	Ser	Val	Pro		

305 310 315 320
 Pro Thr Ile Thr Val Leu Pro Ala Gln Leu Ala Pro Thr Lys Met Thr
 325 330 335
 Gln Pro Ile Leu Gln Thr Ala Leu Pro Cys Gln Ile Leu Gly Gln Thr
 340 345 350
 Ser Leu Val Leu Thr Gln Val Thr Ser Gly Ser Thr Thr Val Ser Cys
 355 360 365
 Ser Pro Ile Thr Leu Ala Val Ala Gly Val Thr Asn His Gly Gln Lys
 370 375 380
 Arg Pro Leu Val Thr Pro Gln Ala Ala Pro Glu Pro Lys Arg Pro His
 385 390 395 400
 Ile Ala Gln Val Pro Glu Pro Pro Pro Lys Val Ala Asn Pro Pro Leu
 405 410 415
 Thr Pro Ala Ser Asp Arg Lys Lys Thr Lys Glu Gln Ile Ala His Leu
 420 425 430
 Lys Ala Ser Phe Leu Gln Ser Gln Phe Pro Asp Asp Ala Glu Val Tyr
 435 440 445
 Arg Leu Ile Glu Val Thr Gly Leu Ala Arg Ser Glu Ile Lys Lys Trp
 450 455 460
 Phe Ser Asp His Arg Tyr Arg Cys Gln Arg Gly Ile Val His Ile Thr
 465 470 475 480
 Ser Glu Ser Leu Ala Lys Asp Gln Leu Ala Ile Ala Ala Ser Arg His
 485 490 495
 Gly Arg Thr Tyr His Ala Tyr Pro Asp Phe Ala Pro Gln Lys Phe Lys
 500 505 510
 Glu Lys Thr Gln Gly Gln Val Lys Ile Leu Glu Asp Ser Phe Leu Lys
 515 520 525
 Ser Ser Phe Pro Thr Gln Ala Glu Leu Asp Arg Leu Arg Val Glu Thr
 530 535 540
 Lys Leu Ser Arg Arg Glu Ile Asp Ser Trp Phe Ser Glu Arg Arg Lys
 545 550 555 560
 Leu Arg Asp Ser Met Glu Gln Ala Val Leu Asp Ser Met Gly Ser Gly
 565 570 575
 Gln Lys Arg Pro Arg Cys Gly Lys Pro Pro Met Val Leu Cys Leu Asp
 580 585 590
 Ser Asn Ser Ser Pro Val Pro Ser
 595 600

<210> 53

<211> 163

<212> PRT

<213> Homo Sapiens

<400> 53

Arg Lys Ser Trp Glu His Lys Glu Glu Ile Ser Glu Ala Glu Pro Gly
 1 5 10 15
 Gly Gly Ser Leu Gly Asp Gly Arg Pro Pro Glu Glu Ser Ala His Glu
 20 25 30
 Met Met Glu Glu Glu Glu Glu Ile Pro Lys Pro Lys Ser Val Val Ala
 35 40 45
 Pro Pro Gly Ala Pro Lys Lys Glu His Val Asn His Val Ala Gly Lys
 50 55 60
 Ser Thr Ile Gly Gly Gln Ile Met Tyr Leu Thr Gly Met Val Asp Lys
 65 70 75 80
 Arg Thr Leu Glu Lys Tyr Glu Arg Glu Ala Lys Glu Lys Asn Arg Glu

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<210> 54
<211> 155
<212> PRT
<213> Homo Sapiens
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<210> 55
<211> 112
<212> PRT
<213> Homo Sapiens
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Met Gln Ala Leu Met Gln Ile Gln Gln Gly Leu Gln Thr Leu Ala Thr
 85 90 95
 Glu Ala Pro Gly Leu Ile Pro Ser Phe Thr Pro Gly Val Gly Val Gly
 100 105 110

<210> 56
 <211> 151
 <212> PRT
 <213> Homo Sapiens

<400> 56
 Lys Phe Gly Met Pro Ile Asp Cys Gly Leu Pro Pro His Ile Asp Phe
 1 5 10 15
 Gly Asp Cys Thr Lys Leu Lys Asp Asp Gln Gly Tyr Phe Glu Gln Glu
 20 25 30
 Asp Asp Met Met Glu Val Pro Tyr Val Thr Pro His Pro Pro Tyr His
 35 40 45
 Leu Gly Ala Val Ala Lys Thr Trp Glu Asn Thr Lys Glu Ser Pro Ala
 50 55 60
 Thr His Ser Ser Asn Phe Leu Tyr Gly Thr Met Val Ser Tyr Thr Cys
 65 70 75 80
 Asn Pro Gly Tyr Glu Leu Leu Gly Asn Pro Val Leu Ile Cys Gln Glu
 85 90 95
 Asp Gly Thr Trp Asn Gly Ser Ala Pro Ser Cys Ile Ser Ile Glu Cys
 100 105 110
 Asp Leu Pro Thr Ala Pro Glu Asn Gly Phe Leu Arg Phe Thr Glu Thr
 115 120 125
 Ser Met Gly Ser Ala Val Gln Tyr Ser Cys Lys Pro Gly His Ile Leu
 130 135 140
 Ala Gly Ser Asp Leu Arg Leu
 145 150

<210> 57
 <211> 220
 <212> PRT
 <213> Homo Sapiens

<400> 57
 Ala Ala Phe Val Ser Glu Val Thr Ser Phe Pro Val Val Gln Leu His
 1 5 10 15
 Met Asn Arg Thr Ala Met Arg Ala Ser Gln Lys Asp Phe Glu Asn Ser
 20 25 30
 Ile Asn Gln Val Lys Leu Leu Lys Lys Asp Pro Gly Asn Glu Val Lys
 35 40 45
 Leu Lys Leu Tyr Ala Leu Tyr Lys Gln Ala Thr Glu Gly Pro Cys Asn
 50 55 60
 Met Pro Lys Pro Gly Val Phe Asp Leu Ile Asn Lys Ala Lys Trp Asp
 65 70 75 80
 Ala Trp Asn Ala Leu Gly Ser Leu Pro Lys Glu Ala Ala Arg Gln Asn
 85 90 95
 Tyr Val Asp Leu Val Ser Ser Leu Ser Pro Ser Leu Glu Ser Ser Ser
 100 105 110
 Gln Val Glu Pro Gly Thr Asp Arg Lys Ser Thr Gly Phe Glu Thr Leu
 115 120 125
 Val Val Thr Ser Glu Asp Gly Ile Thr Lys Ile Met Phe Asn Arg Pro

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<210> 58
<211> 101
<212> PRT
<213> Homo Sapiens
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<210> 59
<211> 43
<212> PRT
<213> Homo Sapiens
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<210> 60
<211> 210
<212> PRT
<213> Homo Sapiens
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-26-

<400> 61

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<210> 62
<211> 238
<212> PRT
<213> Homo Sapiens
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<400> 62

-27-

Glu Pro Ser Thr Ser Asp Leu Gly Thr Thr Asp Val Gln Lys Lys Lys
 85 90 95
 Leu Val Asp Ala Ile Val Ser Gly Asp Thr Ser Lys Leu Met Lys Ile
 100 105 110
 Leu Gln Pro Gln Asp Val Asp Leu Ala Leu Asp Ser Gly Ala Ser Leu
 115 120 125
 Leu His Leu Ala Val Glu Ala Gly Gln Glu Glu Cys Ala Lys Trp Leu
 130 135 140
 Leu Leu Asn Asn Ala Asn Pro Asn Leu Ser Asn Arg Arg Gly Ser Thr
 145 150 155 160
 Pro Leu His Met Ala Val Glu Arg Arg Val Arg Gly Val Val Glu Leu
 165 170 175
 Leu Leu Ala Arg Ile Ser Val Asn Ala Lys Asp Glu Asp Gln Trp Thr
 180 185 190
 Ala Leu His Phe Ala Asn Gly Gly Val His Thr Ala Ala Val Gly Glu
 195 200 205
 Arg Leu Gly Gln Thr Lys Val Asp Phe Glu Gly Arg Thr Pro Met Gln
 210 215 220
 Val Gly Leu Pro Thr Thr Gly Lys Asn Ile Leu Arg Ile Leu
 225 230 235

<210> 63
 <211> 146
 <212> PRT
 <213> Homo Sapiens

<400> 63
 Arg Leu Gly Ala Ala Met Met Glu Gly Leu Asp Asp Gly Pro Asp Phe
 1 5 10 15
 Leu Ser Glu Glu Asp Arg Gly Leu Lys Ala Ile Asn Val Asp Leu Gln
 20 25 30
 Ser Asp Ala Ala Leu Gln Val Asp Ile Ser Asp Ala Leu Ser Glu Arg
 35 40 45
 Asp Lys Val Lys Phe Thr Val His Thr Lys Ile Pro Pro Ala Pro Pro
 50 55 60
 Arg Pro Asp Phe Asp Ala Ser Arg Glu Lys Leu Gln Lys Leu Gly Glu
 65 70 75 80
 Gly Glu Gly Ser Met Thr Lys Glu Glu Phe Thr Lys Met Lys Gln Glu
 85 90 95
 Leu Glu Ala Glu Tyr Leu Ala Ile Phe Lys Lys Thr Val Ala Met His
 100 105 110
 Glu Val Phe Leu Cys Arg Val Ala Ala His Pro Ile Leu Arg Arg Asp
 115 120 125
 Leu Asn Phe His Val Phe Leu Glu Tyr Asn Gln Asp Leu Ser Val Arg
 130 135 140
 Gly Lys
 145

<210> 64
 <211> 63
 <212> PRT
 <213> Homo Sapiens

<400> 64
 Glu Arg Gly His Ser Ile Lys Asp Phe Val Ser Phe Ala Arg His Phe

1	5	10	15
Ser Pro Asn	Pro Arg Ile Val Ser	Val Asn Ala Ser Tyr	Ser Leu Ser
	20	25	30
Asn Glu Ser	Ser Leu Glu Gln Val Tyr Thr	Leu Lys Met	Ser Phe Ile
	35	40	45
Ala Ser Asn	Thr Tyr His Asn Gln Leu Tyr Lys	Glu Gly Phe Leu	
	50	55	60

<210> 65

<211> 199

<212> PRT

<213> Homo Sapiens

<400> 65

Glu Ala Pro	Asp Ser Ala Glu Gly Thr Thr	Leu Thr Val Leu Pro Glu
1	5	10
Gly Glu Glu	Leu Pro Leu Cys Val Ser Glu Ser	Asn Gly Leu Glu Leu
	20	30
Pro Pro Ser	Ala Ala Ser Asp Glu Pro Leu Gln Glu	Pro Leu Glu Ala
	35	45
Asp Arg Thr	Ser Glu Glu Leu Thr Glu Ala Lys Thr	Pro Thr Ser Ser
	50	60
Pro Glu Lys	Pro Gln Glu Leu Val Thr Ala Glu Val Ala Ala	Pro Ser
65	70	80
Thr Ser Ser	Ser Ala Thr Ser Ser Pro Glu Gly Pro Ser	Pro Ala Arg
	85	95
Pro Pro Arg	Arg Arg Thr Ser Ala Asp Val Glu Ile Arg Gly Gln Gly	
	100	110
Thr Gly Arg	Pro Gly Gln Pro Pro Gly Pro Lys Val Leu Arg Lys Leu	
	115	125
Pro Gly Arg	Leu Val Thr Val Val Glu Glu Lys Glu Leu Val Arg Arg	
	130	140
Arg Arg Gln	Gln Arg Gly Ala Ala Ser Thr Leu Val Pro Gly Val Ser	
145	150	160
Glu Thr Ser	Ala Ser Pro Gly Ser Pro Ser Val Arg Ser Met Ser Gly	
	165	175
Pro Glu Ser	Ser Pro Pro Ile Gly Gly Pro Cys Glu Ala Ala Pro Ser	
	180	190
Ser Ser Leu	Pro Thr Pro Pro	
	195	

<210> 66

<211> 1599

<212> DNA

<213> Homo Sapiens

<400> 66

ttctttgaaa	cattattatt	cagaacgaag	gagaatgata	cagatacact	ggctgaggtg	60
ttttgaggtg	cattgaaatg	ttccatgctg	ttacttaggt	taacatgttc	ttgaggtacc	120
atgccatgga	ttaaaaggaa	atttggttaag	tggcttccac	ctaaacgact	tactagggaa	180
gctatgcgaa	attattttaa	agggttaagg	gatcaaatag	tacttatcct	tcattgcaaaa	240
gttgtagaga	agtcatatgg	caatcaaaaa	attttttttt	gccctcccc	ttgtgtatat	300
cttatgggca	gtggatggaa	gaaaaaaaaa	gaacaaatga	aatgcgatgg	ttgttctgaa	360
cacagctctc	atccatgtgc	atttattggg	ataggaaata	gtgaccaaga	aatgcagcag	420
ctaaacttgg	aaggaaagaa	ctattgcaca	gccaaaacat	tgtacatatc	tgattcagac	480

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aagcaaaagc acttcatttt ttctgtaaag gtgttctatg gcaacggtga tgacattggt 540
gtgttcctca gcaagtagat aaaagtcac tccaaacctt ccaaaaagaa gcagtcattg 600
aaaaatgctg acttatgcat tgtctcagga acaaagggtg ctctgtttta tcgactacga 660
tcccagacag ttagtaccag atacttgcac gtagaaggag gtaattttca tgccagttca 720
cagcagtggtg gagcatttta cattcaattc ttggatgatg atggatcaga aggagaagaa 780
ttcacagtct gagatgccta cattcattat ggacaaacat gcaaacttgt gtgctcagtt 840
actggcatgg cactcccaag attgataatt atgaaagttg ataagcatac cgcattattg 900
gatgcagatg atcctgtgtc acaactccat aaatgtgcat tttaccttaa ggatacagaa 960
agaatgtatt tgtgcctttc tcaagaaaga ataattcaat ttcaggccac tccatgtcca 1020
agagaaccaa ataaagagat gataaatgat ggcgcttctt ggacaatcat tagcacagat 1080
aaggcagggt atacatttta tgagggaatg ggccctgtcc ttgccccagt cactcctgtg 1140
cctgtggtag agagccttca gttgaatggc ggtggggacg tagcaatgct tgaacttaca 1200
ggacagaatt tcaactccaa tttacgagtg tggtttgggg gggtagaagc tgaaactatg 1260
tacaggtgtg gagagagtat gctctgtgtc gtcccagaca tttctgcatt ccgagaaggt 1320
tggagatggg tccggcaacc agtccagggt ccagtaactt tgggtccgaaa tgatggaatc 1380
atttattcca ccagccttac ctttacctac acaccagaac cagggcccgcg gccacattgc 1440
agtgcagcag gagcaatcct tctagccaat tcaagccagg tgccccctaa cgaatcaaac 1500
acaaacagcg agggaagtta cacaaacgcc agcacaaatt caaccagtgt cacatcatct 1560
acagccacag tggatccta actaccgtct ttttgctag 1599

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<210> 67

<211> 729

<212> PRT

<213> Homo Sapiens

<400> 67

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Met Gly Lys Lys Tyr Lys Asn Ile Val Leu Leu Lys Gly Leu Glu Val
  1             5             10             15
Ile Asn Asp Tyr His Phe Arg Met Val Lys Ser Leu Leu Ser Asn Asp
      20             25             30
Leu Lys Leu Asn Leu Lys Met Arg Glu Glu Tyr Asp Lys Ile Gln Ile
      35             40             45
Ala Asp Leu Met Glu Glu Lys Phe Arg Gly Asp Ala Gly Leu Gly Lys
      50             55             60
Leu Ile Lys Ile Phe Glu Asp Ile Pro Thr Leu Glu Asp Leu Ala Glu
      65             70             75             80
Thr Leu Lys Lys Glu Lys Leu Lys Val Lys Gly Pro Ala Leu Ser Arg
      85             90             95
Lys Arg Lys Lys Glu Val His Ala Thr Ser Pro Ala Pro Ser Thr Ser
      100            105            110
Ser Thr Val Lys Thr Glu Gly Ala Glu Ala Thr Pro Gly Ala Gln Lys
      115            120            125
Arg Lys Lys Ser Thr Lys Glu Lys Ala Gly Pro Lys Gly Ser Lys Val
      130            135            140
Ser Glu Glu Gln Thr Gln Pro Pro Ser Pro Ala Gly Ala Gly Met Ser
      145            150            155            160
Thr Ala Met Gly Arg Ser Pro Ser Pro Lys Thr Ser Leu Ser Ala Pro
      165            170            175
Pro Asn Ser Ser Ser Thr Glu Asn Pro Lys Thr Val Ala Lys Cys Gln
      180            185            190
Val Thr Pro Arg Arg Asn Val Leu Gln Lys Arg Pro Val Ile Val Lys
      195            200            205
Val Leu Ser Thr Thr Lys Pro Phe Glu Tyr Glu Thr Pro Glu Met Glu
      210            215            220
Lys Lys Ile Met Phe His Ala Thr Val Ala Thr Gln Thr Gln Phe Phe

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225 230 235 240
 His Val Lys Val Leu Asn Thr Ser Leu Lys Glu Lys Phe Asn Gly Lys
 245 250 255
 Lys Ile Ile Ile Ile Ser Asp Tyr Leu Glu Tyr Asp Ser Leu Leu Glu
 260 265 270
 Val Asn Glu Glu Ser Thr Val Ser Glu Ala Gly Pro Asn Gln Thr Phe
 275 280 285
 Glu Val Pro Asn Lys Ile Ile Asn Arg Ala Lys Glu Thr Leu Lys Ile
 290 295 300
 Asp Ile Leu His Lys Lys Gln Ala Ser Gly Asn Ile Val Tyr Gly Val Phe
 305 310 315 320
 Met Leu His Lys Lys Thr Val Asn Gln Lys Thr Thr Ile Tyr Glu Ile
 325 330 335
 Gln Asp Asp Arg Gly Lys Met Asp Val Val Gly Thr Gly Gln Cys His
 340 345 350
 Asn Ile Pro Cys Glu Glu Gly Asp Lys Leu Gln Leu Phe Cys Phe Arg
 355 360 365
 Leu Arg Lys Lys Asn Gln Met Ser Lys Leu Ile Ser Glu Met His Ser
 370 375 380
 Phe Ile Gln Ile Lys Lys Lys Thr Asn Pro Arg Asn Asn Asp Pro Lys
 385 390 395 400
 Ser Met Lys Leu Pro Gln Glu Gln Arg Gln Leu Pro Tyr Pro Ser Glu
 405 410 415
 Ala Ser Thr Thr Phe Pro Glu Ser His Leu Arg Thr Pro Gln Met Pro
 420 425 430
 Pro Thr Thr Pro Ser Ser Ser Phe Phe Thr Lys Lys Ser Glu Asp Thr
 435 440 445
 Ile Ser Lys Met Asn Asp Phe Met Arg Met Gln Ile Leu Lys Glu Gly
 450 455 460
 Ser His Phe Pro Gly Pro Phe Met Thr Ser Ile Gly Pro Ala Glu Ser
 465 470 475 480
 His Pro His Thr Pro Gln Met Pro Pro Ser Thr Pro Ser Ser Ser Phe
 485 490 495
 Leu Thr Thr Leu Lys Pro Arg Leu Lys Thr Glu Pro Glu Glu Val Ser
 500 505 510
 Ile Glu Asp Ser Ala Gln Ser Asp Leu Lys Glu Val Met Val Leu Asn
 515 520 525
 Ala Thr Glu Ser Phe Val Tyr Glu Pro Lys Glu Gln Lys Lys Met Phe
 530 535 540
 His Ala Thr Val Ala Thr Glu Asn Glu Val Phe Arg Val Lys Val Phe
 545 550 555 560
 Asn Ile Asp Leu Lys Glu Lys Phe Thr Pro Lys Lys Ile Ile Ala Ile
 565 570 575
 Ala Asn Tyr Val Cys Arg Asn Gly Phe Leu Glu Val Tyr Pro Phe Thr
 580 585 590
 Leu Val Ala Asp Val Asn Ala Asp Ala Asn Met Glu Ile Pro Lys Gly
 595 600 605
 Leu Ile Arg Ser Ala Ser Val Thr Pro Lys Ile Asn Gln Leu Cys Ser
 610 615 620
 Gln Thr Lys Gly Ser Phe Val Asn Gly Val Phe Glu Val His Lys Lys
 625 630 635 640
 Asn Val Arg Gly Glu Phe Thr Tyr Tyr Glu Ile Gln Asp Asn Thr Gly
 645 650 655
 Lys Met Glu Val Val Val His Gly Arg Leu Asn Thr Ile Asn Cys Glu
 660 665 670

Glu Gly Asp Lys Leu Lys Leu Thr Ser Phe Glu Leu Ala Pro Lys Ser
 675 680 685
 Gly Asn Thr Gly Glu Leu Arg Ser Val Ile His Ser His Ile Lys Val
 690 695 700
 Ile Lys Thr Lys Lys Asn Lys Lys Asp Ile Leu Asn Pro Asp Ser Ser
 705 710 715 720
 Met Glu Thr Ser Pro Asp Phe Phe Phe
 725

<210> 68

<211> 754

<212> PRT

<213> Homo Sapiens

<400> 68

Met Ala Ser Val Pro Ala Leu Gln Leu Thr Pro Ala Asn Pro Pro Pro
 1 5 10 15
 Pro Glu Val Ser Asn Pro Lys Lys Pro Gly Arg Val Thr Asn Gln Leu
 20 25 30
 Gln Tyr Leu His Lys Val Val Met Lys Ala Leu Trp Lys His Gln Phe
 35 40 45
 Ala Trp Pro Phe Arg Gln Pro Val Asp Ala Val Lys Leu Gly Leu Pro
 50 55 60
 Asp Tyr His Lys Ile Ile Lys Gln Pro Met Asp Met Gly Thr Ile Lys
 65 70 75 80
 Arg Arg Leu Glu Asn Asn Tyr Tyr Trp Ala Ala Ser Glu Cys Met Gln
 85 90 95
 Asp Phe Asn Thr Met Phe Thr Asn Cys Tyr Ile Tyr Asn Lys Pro Thr
 100 105 110
 Asp Asp Ile Val Leu Met Ala Gln Thr Leu Glu Lys Ile Phe Leu Gln
 115 120 125
 Lys Val Ala Ser Met Pro Gln Glu Glu Gln Glu Leu Val Val Thr Ile
 130 135 140
 Pro Lys Asn Ser His Lys Lys Gly Ala Lys Leu Ala Ala Leu Gln Gly
 145 150 155 160
 Ser Val Thr Ser Ala His Gln Val Pro Ala Val Ser Ser Val Ser His
 165 170 175
 Thr Ala Leu Tyr Thr Pro Pro Pro Glu Ile Pro Thr Thr Val Leu Asn
 180 185 190
 Ile Pro His Pro Ser Val Ile Ser Ser Pro Leu Leu Lys Ser Leu His
 195 200 205
 Ser Ala Gly Pro Pro Leu Leu Ala Val Thr Ala Ala Pro Pro Ala Gln
 210 215 220
 Pro Leu Ala Lys Lys Lys Gly Val Lys Arg Lys Ala Asp Thr Thr Thr
 225 230 235 240
 Pro Thr Pro Thr Ala Ile Leu Ala Pro Gly Ser Pro Ala Ser Pro Pro
 245 250 255
 Gly Ser Leu Glu Pro Lys Ala Ala Arg Leu Pro Pro Met Arg Arg Glu
 260 265 270
 Ser Gly Arg Pro Ile Lys Pro Pro Arg Lys Asp Leu Pro Asp Ser Gln
 275 280 285
 Gln Gln His Gln Ser Ser Lys Lys Gly Lys Leu Ser Glu Gln Leu Lys
 290 295 300
 His Cys Asn Gly Ile Leu Lys Glu Leu Leu Ser Lys Lys His Ala Ala
 305 310 315 320

Tyr Ala Trp Pro Phe Tyr Lys Pro Val Asp Ala Ser Ala Leu Gly Leu
 325 330 335
 His Asp Tyr His Asp Ile Ile Lys His Pro Met Asp Leu Ser Thr Val
 340 345 350
 Lys Arg Lys Met Glu Asn Arg Asp Tyr Arg Asp Ala Gln Glu Phe Ala
 355 360 365
 Ala Asp Val Arg Leu Met Phe Ser Asn Cys Tyr Lys Tyr Asn Pro Pro
 370 375 380
 Asp His Asp Val Val Ala Met Ala Arg Lys Leu Gln Asp Val Phe Glu
 385 390 395 400
 Phe Arg Tyr Ala Lys Met Pro Asp Glu Pro Leu Glu Pro Gly Pro Leu
 405 410 415
 Pro Val Ser Thr Ala Met Pro Pro Gly Leu Ala Lys Ser Ser Ser Glu
 420 425 430
 Ser Ser Ser Glu Glu Ser Ser Ser Glu Ser Ser Ser Glu Glu Glu Glu
 435 440 445
 Glu Glu Asp Glu Glu Asp Glu Glu Glu Glu Ser Glu Ser Ser Asp
 450 455 460
 Ser Glu Glu Glu Arg Ala His Arg Leu Ala Glu Leu Gln Glu Gln Leu
 465 470 475 480
 Arg Ala Val His Glu Gln Leu Ala Ala Leu Ser Gln Gly Pro Ile Ser
 485 490 495
 Lys Pro Lys Arg Lys Arg Glu Lys Lys Glu Lys Lys Lys Lys Arg Lys
 500 505 510
 Ala Glu Lys His Arg Gly Arg Ala Gly Ala Asp Glu Asp Asp Lys Gly
 515 520 525
 Pro Arg Ala Pro Arg Pro Pro Gln Pro Lys Lys Ser Lys Lys Ala Ser
 530 535 540
 Gly Ser Gly Gly Gly Ser Ala Ala Leu Gly Pro Ser Gly Phe Gly Pro
 545 550 555 560
 Ser Gly Gly Ser Gly Thr Lys Leu Pro Lys Lys Ala Thr Lys Thr Ala
 565 570 575
 Pro Pro Ala Leu Pro Thr Gly Tyr Asp Ser Glu Glu Glu Glu Glu Ser
 580 585 590
 Arg Pro Met Ser Tyr Asp Glu Lys Arg Gln Leu Ser Leu Asp Ile Asn
 595 600 605
 Lys Leu Pro Gly Glu Lys Leu Gly Arg Val Val His Ile Ile Gln Ala
 610 615 620
 Arg Glu Pro Ser Leu Arg Asp Ser Asn Pro Glu Glu Ile Glu Ile Asp
 625 630 635 640
 Phe Glu Thr Leu Lys Pro Ser Thr Leu Arg Glu Leu Glu Arg Tyr Val
 645 650 655
 Leu Ser Cys Leu Arg Lys Lys Pro Arg Lys Pro Tyr Thr Ile Lys Lys
 660 665 670
 Pro Val Gly Lys Thr Lys Glu Glu Leu Ala Leu Glu Lys Lys Arg Glu
 675 680 685
 Leu Glu Lys Arg Leu Gln Asp Val Ser Gly Gln Leu Asn Ser Thr Lys
 690 695 700
 Lys Pro Pro Lys Lys Ala Asn Glu Lys Thr Glu Ser Ser Ser Ala Gln
 705 710 715 720
 Gln Val Ala Val Ser Arg Leu Ser Ala Ser Ser Ser Ser Ser Asp Ser
 725 730 735
 Ser Ser Ser Ser Ser Ser Ser Ser Ser Asp Thr Ser Asp Ser Asp
 740 745 750
 Ser Gly

<400> 69

<210> 70

<211> 621

<212> PRT

<213> Homo Sapiens

<400> 70

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His Val Arg Tyr Thr Ala Thr Gln Arg Gln Ile Lys Ala Ala His Lys
 100 105 110
 Ala Met Val Leu Lys His His Pro Asp Lys Arg Lys Ala Ala Gly Glu
 115 120 125
 Pro Ile Lys Glu Gly Asp Asn Asp Tyr Phe Thr Cys Ile Thr Lys Ala
 130 135 140
 Tyr Glu Met Leu Ser Asp Pro Val Lys Arg Arg Ala Phe Asn Ser Val
 145 150 155 160
 Asp Pro Thr Phe Asp Asn Ser Val Pro Ser Lys Ser Glu Ala Lys Asp
 165 170 175
 Asn Phe Phe Gln Val Phe Ser Pro Val Phe Glu Arg Asn Ser Arg Trp
 180 185 190
 Ser Asn Lys Lys Asn Val Pro Lys Leu Gly Asp Met Asn Ser Ser Phe
 195 200 205
 Glu Asp Val Asp Ala Phe Tyr Ser Phe Trp Tyr Asn Phe Asp Ser Trp
 210 215 220
 Arg Glu Phe Ser Tyr Leu Asp Glu Glu Glu Lys Glu Lys Ala Glu Cys
 225 230 235 240
 Arg Asp Glu Arg Lys Trp Ile Glu Lys Gln Asn Arg Ala Thr Arg Ala
 245 250 255
 Gln Arg Lys Lys Glu Glu Met Asn Arg Ile Arg Thr Leu Val Asp Asn
 260 265 270
 Ala Tyr Ser Cys Asp Pro Arg Ile Lys Lys Phe Lys Glu Glu Glu Lys
 275 280 285
 Ala Lys Lys Glu Ala Glu Lys Lys Ala Lys Ala Glu Ala Arg Arg Lys
 290 295 300
 Glu Gln Glu Ala Lys Glu Lys Gln Arg Gln Ala Glu Leu Glu Ala Val
 305 310 315 320
 Arg Leu Ala Lys Glu Lys Glu Glu Glu Glu Val Arg Gln Gln Ala Leu
 325 330 335
 Leu Ala Lys Lys Glu Lys Asp Ile Gln Lys Lys Ala Ile Lys Lys Glu
 340 345 350
 Arg Gln Lys Leu Arg Asn Ser Cys Lys Ser Trp Asn His Phe Ser Asp
 355 360 365
 Asn Glu Ala Asp Arg Val Lys Met Met Glu Glu Val Glu Lys Leu Cys
 370 375 380
 Asp Arg Leu Glu Leu Ala Ser Leu Gln Gly Leu Asn Glu Ile Leu Ala
 385 390 395 400
 Ser Ser Thr Arg Glu Val Gly Lys Ala Ala Leu Glu Lys Gln Ile Glu
 405 410 415
 Glu Val Asn Glu Gln Met Arg Arg Glu Lys Glu Glu Ala Asp Ala Arg
 420 425 430
 Met Arg Gln Ala Ser Lys Asn Ala Glu Lys Ser Thr Gly Gly Ser Gly
 435 440 445
 Ser Gly Ser Lys Asn Trp Ser Glu Asp Asp Leu Gln Leu Leu Ile Lys
 450 455 460
 Ala Val Asn Leu Phe Pro Ala Gly Thr Asn Ser Arg Trp Glu Val Ile
 465 470 475 480
 Ala Asn Tyr Met Asn Ile His Ser Ser Ser Gly Val Lys Arg Thr Ala
 485 490 495
 Lys Asp Val Ile Ser Lys Ala Lys Ser Leu Gln Lys Leu Asp Pro His
 500 505 510
 Gln Lys Asp Asp Ile Asn Lys Lys Ala Phe Asp Lys Phe Lys Lys Glu
 515 520 525
 His Gly Val Ala Ser Gln Ala Asp Ser Ala Ala Pro Ser Glu Arg Phe

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<210> 71
<211> 267
<212> PRT
<213> Homo Sapiens
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<210> 72
<211> 1752

<212> PRT

<213> Homo Sapiens

<400> 72

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Lys Asn Asp Tyr Asp Gln Leu Gln Lys Ala Arg Gln Cys Glu Lys Glu
          20           25           30
Asn Leu Gly Trp Gln Lys Leu Glu Ser Glu Lys Ala Ile Lys Glu Lys
          35           40           45
Glu Tyr Glu Ile Glu Arg Leu Arg Val Leu Leu Gln Glu Glu Gly Thr
          50           55           60
Arg Lys Arg Glu Tyr Glu Asn Glu Leu Ala Lys Val Arg Asn His Tyr
65           70           75           80
Asn Glu Glu Met Ser Asn Leu Arg Asn Lys Tyr Glu Thr Glu Ile Asn
          85           90           95
Ile Thr Lys Thr Thr Ile Lys Glu Ile Ser Met Gln Lys Glu Asp Asp
          100          105          110
Ser Lys Asn Leu Arg Asn Gln Leu Asp Arg Leu Ser Arg Glu Asn Arg
          115          120          125
Asp Leu Lys Asp Glu Ile Val Arg Leu Asn Asp Ser Ile Leu Gln Ala
130          135          140
Thr Glu Gln Arg Arg Arg Ala Glu Glu Asn Ala Leu Gln Gln Lys Ala
145          150          155          160
Cys Gly Ser Glu Ile Met Gln Lys Lys Gln His Leu Glu Ile Glu Leu
          165          170          175
Lys Gln Val Met Gln Gln Arg Ser Glu Asp Asn Ala Arg His Lys Gln
          180          185          190
Ser Leu Glu Glu Ala Ala Lys Thr Ile Gln Asp Lys Asn Lys Glu Ile
          195          200          205
Glu Arg Leu Lys Ala Glu Phe Gln Glu Glu Ala Lys Arg Arg Trp Glu
210          215          220
Tyr Glu Asn Glu Leu Ser Lys Val Arg Asn Asn Tyr Asp Glu Glu Ile
225          230          235          240
Ile Ser Leu Lys Asn Gln Phe Glu Thr Glu Ile Asn Ile Thr Lys Thr
          245          250          255
Thr Ile His Gln Leu Thr Met Gln Lys Glu Glu Asp Thr Ser Gly Tyr
          260          265          270
Arg Ala Gln Ile Asp Asn Leu Thr Arg Glu Asn Arg Ser Leu Ser Glu
          275          280          285
Glu Ile Lys Arg Leu Lys Asn Thr Leu Thr Gln Thr Thr Glu Asn Leu
290          295          300
Arg Arg Val Glu Glu Asp Ile Gln Gln Gln Lys Ala Thr Gly Ser Glu
305          310          315          320
Val Ser Gln Arg Lys Gln Gln Leu Glu Val Glu Leu Arg Gln Val Thr
          325          330          335
Gln Met Arg Thr Glu Glu Ser Val Arg Tyr Lys Gln Ser Leu Asp Asp
          340          345          350
Ala Ala Lys Thr Ile Gln Asp Lys Asn Lys Glu Ile Glu Arg Leu Lys
          355          360          365
Gln Leu Ile Asp Lys Glu Thr Asn Asp Arg Lys Cys Leu Glu Asp Glu
          370          375          380
Asn Ala Arg Leu Gln Arg Val Gln Tyr Asp Leu Gln Lys Ala Asn Ser
385          390          395          400
Ser Ala Thr Glu Thr Ile Asn Lys Leu Lys Val Gln Glu Gln Glu Leu

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405 410 415
 Thr Arg Leu Arg Ile Asp Tyr Glu Arg Val Ser Gln Glu Arg Thr Val
 420 425 430
 Lys Asp Gln Asp Ile Thr Arg Phe Gln Asn Ser Leu Lys Glu Leu Gln
 435 440 445
 Leu Gln Lys Gln Lys Val Glu Glu Glu Leu Asn Arg Leu Lys Arg Thr
 450 455 460
 Ala Ser Glu Asp Ser Cys Lys Arg Lys Lys Leu Glu Glu Glu Leu Glu
 465 470 475 480
 Gly Met Arg Arg Ser Leu Lys Glu Gln Ala Ile Lys Ile Thr Asn Leu
 485 490 495
 Thr Gln Gln Leu Glu Gln Ala Ser Ile Val Lys Lys Arg Ser Glu Asp
 500 505 510
 Asp Leu Arg Gln Gln Arg Asp Val Leu Asp Gly His Leu Arg Glu Lys
 515 520 525
 Gln Arg Thr Gln Glu Glu Leu Arg Arg Leu Ser Ser Glu Val Glu Ala
 530 535 540
 Leu Arg Arg Gln Leu Leu Gln Glu Gln Glu Ser Val Lys Gln Ala His
 545 550 555 560
 Leu Arg Asn Glu His Phe Gln Lys Ala Ile Glu Asp Lys Ser Arg Ser
 565 570 575
 Leu Asn Glu Ser Lys Ile Glu Ile Glu Arg Leu Gln Ser Leu Thr Glu
 580 585 590
 Asn Leu Thr Lys Glu His Leu Met Leu Glu Glu Glu Leu Arg Asn Leu
 595 600 605
 Arg Leu Glu Tyr Asp Asp Leu Arg Arg Gly Arg Ser Glu Ala Asp Ser
 610 615 620
 Asp Lys Asn Ala Thr Ile Leu Glu Leu Arg Ser Gln Leu Gln Ile Ser
 625 630 635 640
 Asn Asn Arg Thr Leu Glu Leu Gln Gly Leu Ile Asn Asp Leu Gln Arg
 645 650 655
 Glu Arg Glu Asn Leu Arg Gln Glu Ile Glu Lys Phe Gln Lys Gln Ala
 660 665 670
 Leu Glu Ala Ser Asn Arg Ile Gln Glu Ser Lys Asn Gln Cys Thr Gln
 675 680 685
 Val Val Gln Glu Arg Glu Ser Leu Leu Val Lys Ile Lys Val Leu Glu
 690 695 700
 Gln Asp Lys Ala Arg Leu Gln Arg Leu Glu Asp Glu Leu Asn Arg Ala
 705 710 715 720
 Lys Ser Thr Leu Glu Ala Glu Thr Arg Val Lys Gln Arg Leu Glu Cys
 725 730 735
 Glu Lys Gln Gln Ile Gln Asn Asp Leu Asn Gln Trp Lys Thr Gln Tyr
 740 745 750
 Ser Arg Lys Glu Glu Ala Ile Arg Lys Ile Glu Ser Glu Arg Glu Lys
 755 760 765
 Ser Glu Arg Glu Lys Asn Ser Leu Arg Ser Glu Ile Glu Arg Leu Gln
 770 775 780
 Ala Glu Ile Lys Arg Ile Glu Glu Arg Cys Arg Arg Lys Leu Glu Asp
 785 790 795 800
 Ser Thr Arg Glu Thr Gln Ser Gln Leu Glu Thr Glu Arg Ser Arg Tyr
 805 810 815
 Gln Arg Glu Ile Asp Lys Leu Arg Gln Arg Pro Tyr Gly Ser His Arg
 820 825 830
 Glu Thr Gln Thr Glu Cys Glu Trp Thr Val Asp Thr Ser Lys Leu Val
 835 840 845

Phe Asp Gly Leu Arg Lys Lys Val Thr Ala Met Gln Leu Tyr Glu Cys
 850 855 860
 Gln Leu Ile Asp Lys Thr Thr Leu Asp Lys Leu Leu Lys Gly Lys Lys
 865 870 875 880
 Ser Val Glu Glu Val Ala Ser Glu Ile Gln Pro Phe Leu Arg Gly Ala
 885 890 895
 Gly Ser Ile Ala Gly Ala Ser Ala Ser Pro Lys Glu Lys Tyr Ser Leu
 900 905 910
 Val Glu Ala Lys Arg Lys Lys Leu Ile Ser Pro Glu Ser Thr Val Met
 915 920 925
 Leu Leu Glu Ala Gln Ala Ala Thr Gly Gly Ile Ile Asp Pro His Arg
 930 935 940
 Asn Glu Lys Leu Thr Val Asp Ser Ala Ile Ala Arg Asp Leu Ile Asp
 945 950 955 960
 Phe Asp Asp Arg Gln Gln Ile Tyr Ala Ala Glu Lys Ala Ile Thr Gly
 965 970 975
 Phe Asp Asp Pro Phe Ser Gly Lys Thr Val Ser Val Ser Glu Ala Ile
 980 985 990
 Lys Lys Asn Leu Ile Asp Arg Glu Thr Gly Met Arg Leu Leu Glu Ala
 995 1000 1005
 Gln Ile Ala Ser Gly Gly Val Val Asp Pro Val Asn Ser Val Phe Leu
 1010 1015 1020
 Pro Lys Asp Val Ala Leu Ala Arg Gly Leu Ile Asp Arg Asp Leu Tyr
 1025 1030 1035 104
 Arg Ser Leu Asn Asp Pro Arg Asp Ser Gln Lys Asn Phe Val Asp Pro
 1045 1050 1055
 Val Thr Lys Lys Lys Val Ser Tyr Val Gln Leu Lys Glu Arg Cys Arg
 1060 1065 1070
 Ile Glu Pro His Thr Gly Leu Leu Leu Leu Ser Val Gln Lys Arg Ser
 1075 1080 1085
 Met Ser Phe Gln Gly Ile Arg Gln Pro Val Thr Val Thr Glu Leu Val
 1090 1095 1100
 Asp Ser Gly Ile Leu Arg Pro Ser Thr Val Asn Glu Leu Glu Ser Gly
 1105 1110 1115 112
 Gln Ile Ser Tyr Asp Glu Val Gly Glu Arg Ile Lys Asp Phe Leu Gln
 1125 1130 1135
 Gly Ser Ser Cys Ile Ala Gly Ile Tyr Asn Glu Thr Thr Lys Gln Lys
 1140 1145 1150
 Leu Gly Ile Tyr Glu Ala Met Lys Ile Gly Leu Val Arg Pro Gly Thr
 1155 1160 1165
 Ala Leu Glu Leu Leu Glu Ala Gln Ala Ala Thr Gly Phe Ile Val Asp
 1170 1175 1180
 Pro Val Ser Asn Leu Arg Leu Pro Val Glu Glu Ala Tyr Lys Arg Gly
 1185 1190 1195 120
 Leu Val Gly Ile Glu Phe Lys Glu Lys Leu Leu Ser Ala Glu Arg Ala
 1205 1210 1215
 Val Thr Gly Tyr Asn Asp Pro Glu Thr Gly Asn Ile Ile Ser Leu Phe
 1220 1225 1230
 Gln Ala Met Asn Lys Glu Leu Ile Glu Lys Gly His Gly Ile Arg Leu
 1235 1240 1245
 Leu Glu Ala Gln Ile Ala Thr Gly Gly Ile Ile Asp Pro Lys Glu Ser
 1250 1255 1260
 His Arg Leu Pro Val Asp Ile Ala Tyr Lys Arg Gly Tyr Phe Asn Glu
 1265 1270 1275 128
 Glu Leu Ser Glu Ile Leu Ser Asp Pro Ser Asp Asp Thr Lys Gly Phe

1285 1290 1295
 Phe Asp Pro Asn Thr Glu Glu Asn Leu Thr Tyr Leu Gln Leu Lys Glu
 1300 1305 1310
 Arg Cys Ile Lys Asp Glu Glu Thr Gly Leu Cys Leu Leu Pro Leu Lys
 1315 1320 1325
 Glu Lys Lys Lys Gln Val Gln Thr Ser Gln Lys Asn Thr Leu Arg Lys
 1330 1335 1340
 Arg Arg Val Val Ile Val Asp Pro Glu Thr Asn Lys Glu Met Ser Val
 1345 1350 1355 136
 Gln Glu Ala Tyr Lys Lys Gly Leu Ile Asp Tyr Glu Thr Phe Lys Glu
 1365 1370 1375
 Leu Cys Glu Gln Glu Cys Glu Trp Glu Glu Ile Thr Ile Thr Gly Ser
 1380 1385 1390
 Asp Gly Ser Thr Arg Val Val Leu Val Asp Arg Lys Thr Gly Ser Gln
 1395 1400 1405
 Tyr Asp Ile Gln Asp Ala Ile Asp Lys Gly Leu Val Asp Arg Lys Phe
 1410 1415 1420
 Phe Asp Gln Tyr Arg Ser Gly Ser Leu Ser Leu Thr Gln Phe Ala Asp
 1425 1430 1435 144
 Met Ile Ser Leu Lys Asn Gly Val Gly Thr Ser Ser Ser Met Gly Ser
 1445 1450 1455
 Gly Val Ser Asp Asp Val Phe Ser Ser Ser Arg His Glu Ser Val Ser
 1460 1465 1470
 Lys Ile Ser Thr Ile Ser Ser Val Arg Asn Leu Thr Ile Arg Ser Ser
 1475 1480 1485
 Ser Phe Ser Asp Thr Leu Glu Glu Ser Ser Pro Ile Ala Ala Ile Phe
 1490 1495 1500
 Asp Thr Glu Asn Leu Glu Lys Ile Ser Ile Thr Glu Gly Ile Glu Arg
 1505 1510 1515 152
 Gly Ile Val Asp Ser Ile Thr Gly Gln Arg Leu Leu Glu Ala Gln Ala
 1525 1530 1535
 Cys Thr Gly Gly Ile Ile His Pro Thr Thr Gly Gln Lys Leu Ser Leu
 1540 1545 1550
 Gln Asp Ala Val Ser Gln Gly Val Ile Asp Gln Asp Met Ala Thr Ser
 1555 1560 1565
 Val Lys Pro Ala Gln Lys Ala Phe Ile Gly Phe Glu Gly Val Lys Gly
 1570 1575 1580
 Lys Lys Lys Met Ser Ala Ala Glu Ala Val Lys Glu Lys Trp Leu Pro
 1585 1590 1595 160
 Tyr Glu Ala Gly Gln Arg Phe Leu Glu Phe Gln Tyr Leu Thr Gly Gly
 1605 1610 1615
 Leu Val Asp Pro Glu Val His Gly Arg Ile Ser Thr Glu Glu Ala Ile
 1620 1625 1630
 Arg Lys Gly Phe Ile Asp Gly Arg Ala Ala Gln Arg Leu Gln Asp Thr
 1635 1640 1645
 Ser Ser Tyr Ala Lys Ile Leu Thr Cys Pro Lys Thr Lys Leu Lys Ile
 1650 1655 1660
 Ser Tyr Lys Asp Ala Ile Asn Arg Ser Met Val Glu Asp Ile Thr Gly
 1665 1670 1675 168
 Leu Arg Leu Leu Glu Ala Ala Ser Val Ser Ser Lys Gly Leu Pro Ser
 1685 1690 1695
 Pro Tyr Asn Met Ser Ser Ala Pro Gly Ser Arg Ser Gly Ser Arg Ser
 1700 1705 1710
 Gly Ser Arg Ser Gly Ser Arg Ser Gly Ser Arg Ser Gly Ser Arg Arg
 1715 1720 1725

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<210> 73
<211> 1978
<212> PRT
<213> Homo Sapiens
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-41-

His Glu Pro Val Ile Asn Ser Ser Asn Val His Val Gly Ser Arg Gly
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 Ser Lys Lys Asn Tyr Gln Ser Gln Ala Asp Ile Pro Ile Arg Ser Pro
 370 375 380
 Phe Gly Ile Val Lys Ala Ser Trp Leu Pro Lys Phe Ser His Ala Asp
 385 390 395 400
 Ala Gln Lys Met Lys Arg Leu Pro Thr Pro Ser Met Met Asn Asp Tyr
 405 410 415
 Tyr Ala Ala Ser Pro Arg Ile Phe Pro His Leu Cys Ser Leu Cys Asn
 420 425 430
 Val Glu Cys Ser His Leu Lys Asp Trp Ile Gln His Gln Asn Thr Ser
 435 440 445
 Thr His Ile Glu Ser Cys Arg Gln Leu Arg Gln Gln Tyr Pro Asp Trp
 450 455 460
 Asn Pro Glu Ile Leu Pro Ser Arg Arg Asn Glu Gly Asn Arg Lys Glu
 465 470 475 480
 Asn Glu Thr Pro Arg Arg Arg Ser His Ser Pro Ser Pro Arg Arg Ser
 485 490 495
 Arg Arg Ser Ser Ser Ser His Arg Phe Arg Arg Ser Arg Ser Pro Met
 500 505 510
 His Tyr Met Tyr Arg Pro Arg Ser Arg Ser Pro Arg Ile Cys His Arg
 515 520 525
 Phe Ile Ser Arg Tyr Arg Ser Arg Ser Arg Ser Arg Ser Pro Tyr Arg
 530 535 540
 Ile Arg Asn Pro Phe Arg Gly Ser Pro Lys Cys Phe Arg Ser Val Ser
 545 550 555 560
 Pro Glu Arg Met Ser Arg Arg Ser Val Arg Ser Ser Asp Arg Lys Lys
 565 570 575
 Ala Leu Glu Asp Val Val Gln Arg Ser Gly His Gly Thr Glu Phe Asn
 580 585 590
 Lys Gln Lys His Leu Glu Ala Ala Asp Lys Gly His Ser Pro Ala Gln
 595 600 605
 Lys Pro Lys Thr Ser Ser Gly Thr Lys Pro Ser Val Lys Pro Thr Ser
 610 615 620
 Ala Thr Lys Ser Asp Ser Asn Leu Gly Gly His Ser Ile Arg Cys Lys
 625 630 635 640
 Ser Lys Asn Leu Glu Asp Asp Thr Leu Ser Glu Cys Lys Gln Val Ser
 645 650 655
 Asp Lys Ala Val Ser Leu Gln Arg Lys Leu Arg Lys Glu Gln Ser Leu
 660 665 670
 His Tyr Gly Ser Val Leu Leu Ile Thr Glu Leu Pro Glu Asp Gly Cys
 675 680 685
 Thr Glu Glu Asp Val Arg Lys Leu Phe Gln Pro Phe Gly Lys Val Asn
 690 695 700
 Asp Val Leu Ile Val Pro Tyr Arg Lys Glu Ala Tyr Leu Glu Met Glu
 705 710 715 720
 Phe Lys Glu Ala Ile Thr Ala Ile Met Lys Tyr Ile Glu Thr Thr Pro
 725 730 735
 Leu Thr Ile Lys Gly Lys Ser Val Lys Ile Cys Val Pro Gly Lys Lys
 740 745 750
 Lys Ala Gln Asn Lys Glu Val Lys Lys Lys Thr Leu Glu Ser Lys Lys
 755 760 765
 Val Ser Ala Ser Thr Leu Lys Arg Asp Ala Asp Ala Ser Lys Ala Val
 770 775 780
 Glu Ile Val Thr Ser Thr Ser Ala Ala Lys Thr Gly Gln Ala Lys Ala

785 790 795 800
 Cys Val Ala Lys Val Asn Lys Ser Thr Gly Lys Ser Ala Ser Ser Val
 805 810 815
 Lys Ser Val Val Thr Val Ala Val Lys Gly Asn Lys Ala Ser Ile Lys
 820 825 830
 Thr Ala Lys Ser Gly Gly Lys Lys Ser Leu Glu Ala Lys Lys Thr Gly
 835 840 845
 Asn Val Lys Asn Lys Asp Ser Asn Lys Pro Val Thr Ile Pro Glu Asn
 850 855 860
 Ser Glu Ile Lys Thr Ser Ile Glu Val Lys Ala Thr Glu Asn Cys Ala
 865 870 875 880
 Lys Glu Ala Ile Ser Asp Ala Ala Leu Glu Ala Thr Glu Asn Glu Pro
 885 890 895
 Leu Asn Lys Glu Thr Glu Glu Met Cys Val Met Leu Val Ser Asn Leu
 900 905 910
 Pro Asn Lys Gly Tyr Ser Val Glu Glu Val Tyr Asp Leu Ala Lys Pro
 915 920 925
 Phe Gly Gly Leu Lys Asp Ile Leu Ile Leu Ser Ser His Lys Lys Ala
 930 935 940
 Tyr Ile Glu Ile Asn Arg Lys Ala Ala Glu Ser Met Val Lys Phe Tyr
 945 950 955 960
 Thr Cys Phe Pro Val Leu Met Asp Gly Asn Gln Leu Ser Ile Ser Met
 965 970 975
 Ala Pro Glu Asn Met Asn Ile Lys Asp Glu Glu Ala Ile Phe Ile Thr
 980 985 990
 Leu Val Lys Glu Asn Asp Pro Glu Ala Asn Ile Asp Thr Ile Tyr Asp
 995 1000 1005
 Arg Phe Val His Leu Asp Asn Leu Pro Glu Asp Gly Leu Gln Cys Val
 1010 1015 1020
 Leu Cys Val Gly Leu Gln Phe Gly Lys Val Asp His His Val Phe Ile
 1025 1030 1035 104
 Ser Asn Arg Asn Lys Ala Ile Leu Gln Leu Asp Ser Pro Glu Ser Ala
 1045 1050 1055
 Gln Ser Met Tyr Ser Phe Leu Lys Gln Asn Pro Gln Asn Ile Gly Asp
 1060 1065 1070
 His Met Leu Thr Cys Ser Leu Ser Pro Lys Ile Asp Leu Pro Glu Val
 1075 1080 1085
 Gln Ile Glu His Asp Pro Glu Leu Glu Lys Glu Ser Pro Gly Leu Lys
 1090 1095 1100
 Asn Ser Pro Ile Asp Glu Ser Glu Val Gln Thr Ala Thr Asp Ser Pro
 1105 1110 1115 112
 Ser Val Lys Pro Asn Glu Leu Glu Glu Glu Ser Thr Pro Ser Ile Gln
 1125 1130 1135
 Thr Glu Thr Leu Val Gln Gln Glu Glu Pro Cys Glu Glu Glu Ala Glu
 1140 1145 1150
 Lys Ala Thr Cys Asp Ser Asp Phe Ala Val Glu Thr Leu Glu Leu Glu
 1155 1160 1165
 Thr Gln Gly Glu Glu Val Lys Glu Glu Ile Pro Leu Val Ala Ser Ala
 1170 1175 1180
 Ser Val Ser Ile Glu Gln Phe Thr Glu Asn Ala Glu Glu Cys Ala Leu
 1185 1190 1195 120
 Asn Gln Gln Met Phe Asn Ser Asp Leu Glu Lys Lys Gly Ala Glu Ile
 1205 1210 1215
 Ile Asn Pro Lys Thr Ala Leu Leu Pro Ser Asp Ser Val Phe Ala Glu
 1220 1225 1230

Glu Arg Asn Leu Lys Gly Ile Leu Glu Glu Ser Pro Ser Glu Ala Glu
 1235 1240 1245
 Asp Phe Ile Ser Gly Ile Thr Gln Thr Met Val Glu Ala Val Ala Glu
 1250 1255 1260
 Val Glu Lys Asn Glu Thr Val Ser Glu Ile Leu Pro Ser Thr Cys Ile
 1265 1270 1275 128
 Val Thr Leu Val Pro Gly Ile Pro Thr Gly Asp Glu Lys Thr Val Asp
 1285 1290 1295
 Lys Lys Asn Ile Ser Glu Lys Lys Gly Asn Met Asp Glu Lys Glu Glu
 1300 1305 1310
 Lys Glu Phe Asn Thr Lys Glu Thr Arg Met Asp Leu Gln Ile Gly Thr
 1315 1320 1325
 Glu Lys Ala Glu Lys Asn Glu Gly Arg Met Asp Ala Glu Lys Val Glu
 1330 1335 1340
 Lys Met Ala Ala Met Lys Glu Lys Pro Ala Glu Asn Thr Leu Phe Lys
 1345 1350 1355 136
 Ala Tyr Pro Asn Lys Gly Val Gly Gln Ala Asn Lys Pro Asp Glu Thr
 1365 1370 1375
 Ser Lys Thr Ser Ile Leu Ala Val Ser Asp Val Ser Ser Ser Lys Pro
 1380 1385 1390
 Ser Ile Lys Ala Val Ile Val Ser Ser Pro Lys Ala Lys Ala Thr Val
 1395 1400 1405
 Ser Lys Thr Glu Asn Gln Lys Ser Phe Pro Lys Ser Val Pro Arg Asp
 1410 1415 1420
 Gln Ile Asn Ala Glu Lys Lys Leu Ser Ala Lys Glu Phe Gly Leu Leu
 1425 1430 1435 144
 Lys Pro Thr Ser Ala Arg Ser Gly Leu Ala Glu Ser Ser Ser Lys Phe
 1445 1450 1455
 Lys Pro Thr Gln Ser Ser Leu Thr Arg Gly Gly Ser Gly Arg Ile Ser
 1460 1465 1470
 Ala Leu Gln Gly Lys Leu Ser Lys Leu Asp Tyr Arg Asp Ile Thr Lys
 1475 1480 1485
 Gln Ser Gln Glu Thr Glu Ala Arg Pro Ser Ile Met Lys Arg Asp Asp
 1490 1495 1500
 Ser Asn Asn Lys Thr Leu Ala Glu Gln Asn Thr Lys Asn Pro Lys Ser
 1505 1510 1515 152
 Thr Thr Gly Arg Ser Ser Lys Ser Lys Glu Pro Leu Phe Pro Phe
 1525 1530 1535
 Asn Leu Asp Glu Phe Val Thr Val Asp Glu Val Ile Glu Glu Val Asn
 1540 1545 1550
 Pro Ser Gln Ala Lys Gln Asn Pro Leu Lys Gly Lys Arg Lys Glu Thr
 1555 1560 1565
 Leu Lys Asn Val Pro Phe Ser Glu Leu Asn Leu Lys Lys Lys Gly
 1570 1575 1580
 Lys Thr Ser Thr Pro Arg Gly Val Glu Gly Glu Leu Ser Phe Val Thr
 1585 1590 1595 160
 Leu Asp Glu Ile Gly Glu Glu Glu Asp Ala Ala Ala His Leu Ala Gln
 1605 1610 1615
 Ala Leu Val Thr Val Asp Glu Val Ile Asp Glu Glu Glu Leu Asn Met
 1620 1625 1630
 Glu Glu Met Val Lys Asn Ser Asn Ser Leu Phe Thr Leu Asp Glu Leu
 1635 1640 1645
 Ile Asp Gln Asp Asp Cys Ile Ser His Ser Glu Pro Lys Asp Val Thr
 1650 1655 1660
 Val Leu Ser Val Ala Glu Glu Gln Asp Leu Leu Lys Gln Glu Arg Leu

1665 1670 1675 168
 Val Thr Val Asp Glu Ile Gly Glu Val Glu Glu Leu Pro Leu Asn Glu
 1685 1690 1695
 Ser Ala Asp Ile Thr Phe Ala Thr Leu Asn Thr Lys Gly Asn Glu Gly
 1700 1705 1710
 Asp Ile Val Arg Asp Ser Ile Gly Phe Ile Ser Ser Gln Val Pro Glu
 1715 1720 1725
 Asp Pro Ser Thr Leu Val Thr Val Asp Glu Ile Gln Asp Asp Ser Ser
 1730 1735 1740
 Asp Leu His Leu Val Thr Leu Asp Glu Val Thr Glu Glu Asp Glu Asp
 1745 1750 1755 176
 Ser Leu Ala Asp Phe Asn Asn Leu Lys Glu Glu Leu Asn Phe Val Thr
 1765 1770 1775
 Val Asp Glu Val Gly Glu Glu Glu Asp Gly Asp Asn Asp Leu Lys Val
 1780 1785 1790
 Glu Leu Ala Gln Ser Lys Asn Asp His Pro Thr Asp Lys Lys Gly Asn
 1795 1800 1805
 Arg Lys Lys Arg Ala Val Asp Thr Lys Lys Thr Lys Leu Glu Ser Leu
 1810 1815 1820
 Ser Gln Val Gly Pro Val Asn Glu Asn Val Met Glu Glu Asp Leu Lys
 1825 1830 1835 184
 Thr Met Ile Glu Arg His Leu Thr Ala Lys Thr Pro Thr Lys Arg Val
 1845 1850 1855
 Arg Ile Gly Lys Thr Leu Pro Ser Glu Lys Ala Val Val Thr Glu Pro
 1860 1865 1870
 Ala Lys Gly Glu Glu Ala Phe Gln Met Ser Glu Val Asp Glu Glu Ser
 1875 1880 1885
 Gly Leu Lys Asp Ser Glu Pro Glu Arg Lys Arg Lys Lys Thr Glu Asp
 1890 1895 1900
 Ser Ser Ser Gly Lys Ser Val Ala Ser Asp Val Pro Glu Glu Leu Asp
 1905 1910 1915 192
 Phe Leu Val Pro Lys Ala Gly Phe Phe Cys Pro Ile Cys Ser Leu Phe
 1925 1930 1935
 Tyr Ser Gly Glu Lys Ala Met Thr Asn His Cys Lys Ser Thr Arg His
 1940 1945 1950
 Lys Gln Asn Thr Glu Lys Phe Met Ala Lys Gln Arg Lys Glu Lys Glu
 1955 1960 1965
 Gln Asn Glu Ala Glu Glu Arg Ser Ser Arg
 1970 1975

<210> 74

<211> 366

<212> PRT

<213> Homo Sapiens

<400> 74

Met Arg Val Met Ala Pro Arg Thr Leu Ile Leu Leu Leu Ser Gly Ala
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 Leu Ala Leu Thr Glu Thr Trp Ala Gly Ser His Ser Met Arg Tyr Phe
 20 25 30
 Tyr Thr Ala Val Ser Arg Pro Gly Arg Gly Glu Pro His Phe Ile Ala
 35 40 45
 Val Gly Tyr Val Asp Asp Thr Gln Phe Val Arg Phe Asp Ser Asp Ala
 50 55 60
 Ala Ser Pro Arg Gly Glu Pro Arg Ala Pro Trp Val Glu Gln Glu Gly

65 70 75 80
 Pro Glu Tyr Trp Asp Arg Glu Thr Gln Lys Tyr Lys Arg Gln Ala Gln
 85 90 95
 Thr Asp Arg Val Ser Leu Arg Asn Leu Arg Gly Tyr Tyr Asn Gln Ser
 100 105 110
 Glu Ala Gly Ser His Ile Ile Gln Arg Met Tyr Gly Cys Asp Val Gly
 115 120 125
 Pro Asp Gly Arg Leu Leu Arg Gly Tyr Asp Gln Tyr Ala Tyr Asp Gly
 130 135 140
 Lys Asp Tyr Ile Ala Leu Asn Glu Asp Leu Arg Ser Trp Thr Ala Ala
 145 150 155 160
 Asp Thr Ala Ala Gln Ile Thr Gln Arg Lys Trp Glu Ala Ala Arg Glu
 165 170 175
 Ala Glu Gln Leu Arg Ala Tyr Leu Glu Gly Leu Cys Val Glu Trp Leu
 180 185 190
 Arg Arg Tyr Leu Lys Asn Gly Lys Glu Thr Leu Gln Arg Ala Glu His
 195 200 205
 Pro Lys Thr His Val Thr His His Pro Val Ser Asp His Glu Ala Thr
 210 215 220
 Leu Arg Cys Trp Ala Leu Gly Phe Tyr Pro Ala Glu Ile Thr Leu Thr
 225 230 235 240
 Trp Gln Trp Asp Gly Glu Asp Gln Thr Gln Asp Thr Glu Leu Val Glu
 245 250 255
 Thr Arg Pro Ala Gly Asp Gly Thr Phe Gln Lys Trp Ala Ala Val Val
 260 265 270
 Val Pro Ser Gly Glu Glu Gln Arg Tyr Thr Cys His Val Gln His Glu
 275 280 285
 Gly Leu Pro Glu Pro Leu Thr Leu Arg Trp Glu Pro Ser Ser Gln Pro
 290 295 300
 Thr Ile Pro Ile Val Gly Ile Val Ala Gly Leu Ala Val Leu Ala Val
 305 310 315 320
 Leu Ala Val Leu Gly Ala Val Val Ala Val Val Met Cys Arg Arg Lys
 325 330 335
 Ser Ser Gly Gly Lys Gly Gly Ser Cys Ser Gln Ala Ala Ser Ser Asn
 340 345 350
 Ser Ala Gln Gly Ser Asp Glu Ser Leu Ile Ala Cys Lys Ala
 355 360 365

<210> 75

<211> 240

<212> PRT

<213> Homo Sapiens

<400> 75

Met Gly Leu Glu Leu Tyr Leu Asp Leu Leu Ser Gln Pro Cys Arg Ala
 1 5 10 15
 Val Tyr Ile Phe Ala Lys Lys Asn Asp Ile Pro Phe Glu Leu Arg Ile
 20 25 30
 Val Asp Leu Ile Lys Gly Gln His Leu Ser Asp Ala Phe Ala Gln Val
 35 40 45
 Asn Pro Leu Lys Lys Val Pro Ala Leu Lys Asp Gly Asp Phe Thr Leu
 50 55 60
 Thr Glu Ser Val Ala Ile Leu Leu Tyr Leu Thr Arg Lys Tyr Lys Val
 65 70 75 80
 Pro Asp Tyr Trp Tyr Pro Gln Asp Leu Gln Ala Arg Ala Arg Val Asp

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<210> 76
<211> 953
<212> PRT
<213> Homo Sapiens
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	<400> 76														
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Pro	Gln	Leu	Lys 20	Glu	Phe	Ala	Leu	His 25	Lys	Leu	Asn	Ala	Val 30	Val	Asn
Asp	Phe 35	Trp	Ala	Glu	Ile	Ser 40	Glu	Ser	Val	Asp	Lys	Ile 45	Glu	Val	Leu
Tyr 50	Glu	Asp	Glu	Gly	Phe 55	Arg	Ser	Arg	Gln	Phe	Ala 60	Ala	Leu	Val	Ala
Ser 65	Lys	Val	Phe	Tyr	His 70	Leu	Gly	Ala	Phe 75	Glu	Ser	Leu	Asn 80	Tyr	
Ala	Leu	Gly	Ala	Arg 85	Asp	Leu	Phe	Asn 90	Val	Asn	Asp	Asn	Ser 95	Glu	Tyr
Val	Glu	Thr	Ile 100	Ile	Ala	Lys	Cys	Ile 105	Asp	His	Tyr	Thr 110	Lys	Gln	Cys
Val 115	Glu	Asn	Ala	Asp	Leu	Pro	Glu	Gly 120	Glu	Lys	Lys	Pro 125	Ile	Asp	Gln
Arg 130	Leu	Glu	Gly	Ile	Val	Asn 135	Lys	Met	Phe 140	Gln	Arg	Cys	Leu	Asp	Asp
His 145	Lys	Tyr	Lys	Gln	Ala 150	Ile	Gly	Ile	Ala 155	Leu	Glu	Thr 160	Arg	Arg	Leu
Asp	Val	Phe	Glu	Lys 165	Thr	Ile	Leu	Glu	Ser 170	Asn	Asp	Val	Pro 175	Gly	Met
Leu	Ala	Tyr	Ser 180	Leu	Lys	Leu	Cys	Met 185	Ser	Leu	Met	Gln 190	Asn	Lys	Gln
Phe	Arg 195	Asn	Lys	Val	Leu	Arg	Val	Leu 200	Val	Lys	Ile	Tyr 205	Met	Asn	Leu
Glu 210	Lys	Pro	Asp	Phe	Ile	Asn 215	Val	Cys	Gln	Cys	Leu	Ile 220	Phe	Leu	Asp
Asp	Pro	Gln	Ala	Val	Ser	Asp	Ile	Leu	Glu	Lys	Leu	Val	Lys	Glu	Asp

[illegible]

225 230 235 240
 Asn Leu Leu Met Ala Tyr Gln Ile Cys Phe Asp Leu Tyr Glu Ser Ala
 245 250 255
 Ser Gln Gln Phe Leu Ser Ser Val Ile Gln Asn Leu Arg Thr Val Gly
 260 265 270
 Thr Pro Ile Ala Ser Val Pro Gly Ser Thr Asn Thr Gly Thr Val Pro
 275 280 285
 Gly Ser Glu Lys Asp Ser Asp Ser Met Glu Thr Glu Glu Lys Thr Ser
 290 295 300
 Ser Ala Phe Val Gly Lys Thr Pro Glu Ala Ser Pro Glu Pro Lys Asp
 305 310 315 320
 Gln Thr Leu Lys Met Ile Lys Ile Leu Ser Gly Glu Met Ala Ile Glu
 325 330 335
 Leu His Leu Gln Phe Leu Ile Arg Asn Asn Asn Thr Asp Leu Met Ile
 340 345 350
 Leu Lys Asn Thr Lys Asp Ala Val Arg Asn Ser Val Cys His Thr Ala
 355 360 365
 Thr Val Ile Ala Asn Ser Phe Met His Cys Gly Thr Thr Ser Asp Gln
 370 375 380
 Phe Leu Arg Asp Asn Leu Glu Trp Leu Ala Arg Ala Thr Asn Trp Ala
 385 390 395 400
 Lys Phe Thr Ala Thr Ala Ser Leu Gly Val Ile His Lys Gly His Glu
 405 410 415
 Lys Glu Ala Leu Gln Leu Met Ala Thr Tyr Leu Pro Lys Asp Thr Ser
 420 425 430
 Pro Gly Ser Ala Tyr Gln Glu Gly Gly Gly Leu Tyr Ala Leu Gly Leu
 435 440 445
 Ile His Ala Asn His Gly Gly Asp Ile Ile Asp Tyr Leu Leu Asn Gln
 450 455 460
 Leu Lys Asn Ala Ser Asn Asp Ile Val Arg His Gly Gly Ser Leu Gly
 465 470 475 480
 Leu Gly Leu Ala Ala Met Gly Thr Ala Arg Gln Asp Val Tyr Asp Leu
 485 490 495
 Leu Lys Thr Asn Leu Tyr Gln Asp Asp Ala Val Thr Gly Glu Ala Ala
 500 505 510
 Gly Leu Ala Leu Gly Leu Val Met Leu Gly Ser Lys Asn Ala Gln Ala
 515 520 525
 Ile Glu Asp Met Val Gly Tyr Ala Gln Glu Thr Gln His Glu Lys Ile
 530 535 540
 Leu Arg Gly Leu Ala Val Gly Ile Ala Leu Val Met Tyr Gly Arg Met
 545 550 555 560
 Glu Glu Ala Asp Ala Leu Ile Glu Ser Leu Cys Arg Asp Lys Asp Pro
 565 570 575
 Ile Leu Arg Arg Ser Gly Met Tyr Thr Val Ala Met Ala Tyr Cys Gly
 580 585 590
 Ser Gly Asn Asn Lys Ala Ile Arg Arg Leu Leu His Val Ala Val Ser
 595 600 605
 Asp Val Asn Asp Asp Val Arg Ser Ala Ala Val Glu Ser Leu Gly Phe
 610 615 620
 Ile Leu Phe Arg Thr Pro Glu Gln Cys Pro Ser Val Val Ser Leu Leu
 625 630 635 640
 Ser Glu Ser Tyr Asn Pro His Val Arg Tyr Gly Ala Ala Met Ala Leu
 645 650 655
 Gly Ile Cys Cys Ala Gly Thr Gly Asn Lys Glu Ala Ile Asn Leu Leu
 660 665 670

Glu Pro Met Thr Asn Asp Pro Val Asn Tyr Val Arg Gln Gly Ala Leu
 675 680 685
 Ile Ala Ser Ala Leu Ile Met Ile Gln Gln Thr Glu Ile Thr Cys Pro
 690 695 700
 Lys Val Asn Gln Phe Arg Gln Leu Tyr Ser Lys Val Ile Asn Asp Lys
 705 710 715 720
 His Asp Asp Val Met Ala Lys Phe Gly Ala Ile Leu Ala Gln Gly Ile
 725 730 735
 Leu Asp Ala Gly Gly His Asn Val Thr Ile Ser Leu Gln Ser Arg Thr
 740 745 750
 Gly His Thr His Met Pro Ser Val Val Gly Val Leu Val Phe Thr Gln
 755 760 765
 Phe Trp Phe Trp Phe Pro Leu Ser His Phe Leu Ser Leu Ala Tyr Thr
 770 775 780
 Pro Thr Cys Val Ile Gly Leu Asn Lys Asp Leu Lys Met Pro Lys Val
 785 790 795 800
 Gln Tyr Lys Ser Asn Cys Lys Pro Ser Thr Phe Ala Tyr Pro Ala Pro
 805 810 815
 Leu Glu Val Pro Lys Glu Lys Glu Lys Glu Lys Val Ser Thr Ala Val
 820 825 830
 Leu Ser Ile Thr Ala Lys Ala Lys Lys Lys Glu Lys Glu Lys Glu Lys
 835 840 845
 Lys Glu Glu Glu Lys Met Glu Val Asp Glu Ala Glu Lys Lys Glu Glu
 850 855 860
 Lys Glu Lys Lys Lys Glu Pro Glu Pro Asn Phe Gln Leu Leu Asp Asn
 865 870 875 880
 Pro Ala Arg Val Met Pro Ala Gln Leu Lys Val Leu Thr Met Pro Glu
 885 890 895
 Thr Cys Arg Tyr Gln Pro Phe Lys Pro Leu Ser Ile Gly Gly Ile Ile
 900 905 910
 Ile Leu Lys Asp Thr Ser Glu Asp Ile Glu Glu Leu Val Glu Pro Val
 915 920 925
 Ala Ala His Gly Pro Lys Ile Glu Glu Glu Glu Gln Glu Pro Glu Pro
 930 935 940
 Pro Glu Pro Phe Glu Tyr Ile Asp Asp
 945 950

<210> 77

<211> 335

<212> PRT

<213> Homo Sapiens

<400> 77

Met Gly Lys Val Lys Val Gly Val Asn Gly Phe Gly Arg Ile Gly Arg
 1 5 10 15
 Leu Val Thr Arg Ala Ala Phe Asn Ser Gly Lys Val Asp Ile Val Ala
 20 25 30
 Ile Asn Asp Pro Phe Ile Asp Leu Asn Tyr Met Val Tyr Met Phe Gln
 35 40 45
 Tyr Asp Ser Thr His Gly Lys Phe His Gly Thr Val Lys Ala Glu Asn
 50 55 60
 Gly Lys Leu Val Ile Asn Gly Asn Pro Ile Thr Ile Phe Gln Glu Arg
 65 70 75 80
 Asp Pro Ser Lys Ile Lys Trp Gly Asp Ala Gly Ala Glu Tyr Val Val
 85 90 95

Glu Ser Thr Gly Val Phe Thr Thr Met Glu Lys Ala Gly Ala His Leu
 100 105 110
 Gln Gly Gly Ala Lys Arg Val Ile Ile Ser Ala Pro Ser Ala Asp Ala
 115 120 125
 Pro Met Phe Val Met Gly Val Asn His Glu Lys Tyr Asp Asn Ser Leu
 130 135 140
 Lys Ile Ile Ser Asn Ala Ser Cys Thr Thr Asn Cys Leu Ala Pro Leu
 145 150 155 160
 Ala Lys Val Ile His Asp Asn Phe Gly Ile Val Glu Gly Leu Met Thr
 165 170 175
 Thr Val His Ala Ile Thr Ala Thr Gln Lys Thr Val Asp Gly Pro Ser
 180 185 190
 Gly Lys Leu Trp Arg Asp Gly Arg Gly Ala Leu Gln Asn Ile Ile Pro
 195 200 205
 Ala Ser Thr Gly Ala Ala Lys Ala Val Gly Lys Val Ile Pro Glu Leu
 210 215 220
 Asn Gly Lys Leu Thr Gly Met Ala Phe Arg Val Pro Thr Ala Asn Val
 225 230 235 240
 Ser Val Val Asp Leu Thr Cys Arg Leu Glu Lys Pro Ala Lys Tyr Asp
 245 250 255
 Asp Ile Lys Lys Val Val Lys Gln Ala Ser Glu Gly Pro Leu Lys Gly
 260 265 270
 Ile Leu Gly Tyr Thr Glu His Gln Val Val Ser Ser Asp Phe Asn Ser
 275 280 285
 Asp Thr His Ser Ser Thr Phe Asp Ala Gly Ala Gly Ile Ala Leu Asn
 290 295 300
 Asp His Phe Val Lys Leu Ile Ser Trp Tyr Asp Asn Glu Phe Gly Tyr
 305 310 315 320
 Ser Asn Arg Val Val Asp Leu Met Ala His Met Ala Ser Lys Glu
 325 330 335

<210> 78

<211> 117

<212> PRT

<213> Homo Sapiens

<400> 78

Met Val Gln Arg Leu Thr Tyr Arg Arg Arg Leu Ser Tyr Asn Thr Ala
 1 5 10 15
 Ser Asn Lys Thr Arg Leu Ser Arg Thr Pro Gly Asn Arg Ile Val Tyr
 20 25 30
 Leu Tyr Thr Lys Lys Val Gly Lys Ala Pro Lys Ser Ala Cys Gly Val
 35 40 45
 Cys Pro Gly Lys Leu Arg Gly Val Arg Pro Val Arg Pro Lys Val Leu
 50 55 60
 Met Arg Leu Ser Lys Thr Lys Lys His Val Ser Arg Ala Tyr Gly Gly
 65 70 75 80
 Ser Met Cys Ala Lys Cys Val Arg Asp Arg Ile Lys Arg Ala Phe Leu
 85 90 95
 Ile Glu Glu Gln Lys Ile Ile Val Lys Val Leu Lys Ala Gln Ala Gln
 100 105 110
 Ser Gln Lys Ala Lys
 115

<210> 79

<211> 614

<212> PRT

<213> Homo Sapiens

<400> 79

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Arg Ser Gly Gln Pro Arg Ala Glu Gly Leu Gly Ala Gly Ala Ala Gly
 1          5          10          15
Pro Leu Arg Ala Met Ala Ala Pro Val Lys Gly Asn Arg Lys Gln Ser
          20          25          30
Thr Glu Gly Asp Ala Leu Asp Pro Pro Ala Ser Pro Lys Pro Ala Gly
          35          40          45
Lys Gln Asn Gly Ile Gln Asn Pro Ile Ser Leu Glu Asp Ser Pro Glu
          50          55          60
Ala Gly Gly Glu Arg Glu Glu Glu Gln Glu Arg Glu Glu Glu Gln Ala
65          70          75          80
Phe Leu Val Ser Leu Tyr Lys Phe Met Lys Glu Arg His Thr Pro Ile
          85          90          95
Glu Arg Val Pro His Leu Gly Phe Lys Gln Ile Asn Leu Trp Lys Ile
          100          105          110
Tyr Lys Ala Val Glu Lys Leu Gly Ala Tyr Glu Leu Val Thr Gly Arg
          115          120          125
Arg Leu Trp Lys Asn Val Tyr Asp Glu Leu Gly Gly Ser Pro Gly Ser
          130          135          140
Thr Ser Ala Ala Thr Cys Thr Arg Arg His Tyr Glu Arg Leu Val Leu
145          150          155          160
Pro Tyr Val Arg His Leu Lys Gly Glu Asp Asp Lys Pro Leu Pro Thr
          165          170          175
Ser Lys Pro Arg Lys Gln Tyr Lys Met Ala Lys Glu Asn Arg Gly Asp
          180          185          190
Asp Gly Ala Thr Glu Arg Pro Lys Lys Ala Lys Glu Glu Arg Arg Met
          195          200          205
Asp Gln Met Met Pro Gly Lys Thr Lys Ala Asp Ala Ala Asp Pro Ala
          210          215          220
Pro Leu Pro Ser Gln Glu Pro Pro Arg Asn Ser Thr Glu Gln Gln Gly
225          230          235          240
Leu Ala Ser Gly Ser Ser Val Ser Phe Val Gly Ala Ser Gly Cys Pro
          245          250          255
Glu Ala Tyr Lys Arg Leu Leu Ser Ser Phe Tyr Cys Lys Gly Thr His
          260          265          270
Gly Ile Met Ser Pro Leu Ala Lys Lys Lys Leu Leu Ala Gln Val Ser
          275          280          285
Lys Val Glu Ala Leu Gln Cys Gln Glu Glu Gly Cys Arg His Gly Ala
          290          295          300
Glu Pro Gln Ala Ser Pro Ala Val His Leu Pro Glu Ser Pro Gln Ser
305          310          315          320
Pro Lys Gly Leu Thr Glu Asn Ser Arg His Arg Leu Thr Pro Gln Glu
          325          330          335
Gly Leu Gln Ala Pro Gly Gly Ser Leu Arg Glu Glu Ala Gln Ala Gly
          340          345          350
Pro Cys Pro Ala Ala Pro Ile Phe Lys Gly Cys Phe Tyr Thr His Pro
          355          360          365
Thr Glu Val Leu Lys Pro Val Ser Gln His Pro Arg Asp Phe Phe Ser
          370          375          380
Arg Leu Lys Asp Gly Val Leu Leu Gly Pro Pro Gly Lys Glu Gly Leu
385          390          395          400

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Ser Val Lys Glu Pro Gln Leu Val Trp Gly Gly Asp Ala Asn Arg Pro
405 410 415
Ser Ala Phe His Lys Gly Gly Ser Arg Lys Gly Ile Leu Tyr Pro Lys
420 425 430
Pro Lys Ala Cys Trp Val Ser Pro Met Ala Lys Val Pro Ala Glu Ser
435 440 445
Pro Thr Leu Pro Pro Thr Phe Pro Ser Ser Pro Gly Leu Gly Ser Lys
450 455 460
Arg Ser Leu Glu Glu Glu Gly Ala Ala His Ser Gly Lys Arg Leu Arg
465 470 475 480
Ala Val Ser Pro Phe Leu Lys Glu Ala Asp Ala Lys Lys Cys Gly Ala
485 490 495
Lys Pro Ala Gly Ser Gly Leu Val Ser Cys Leu Leu Gly Pro Ala Leu
500 505 510
Gly Pro Val Pro Pro Glu Ala Tyr Arg Gly Thr Met Leu His Cys Pro
515 520 525
Leu Asn Phe Thr Gly Thr Pro Gly Pro Leu Lys Gly Gln Ala Ala Leu
530 535 540
Pro Phe Ser Pro Leu Val Ile Pro Ala Phe Pro Ala His Phe Leu Ala
545 550 555 560
Thr Ala Gly Pro Ser Pro Met Ala Ala Gly Leu Met His Phe Pro Pro
565 570 575
Thr Ser Phe Asp Ser Ala Leu Arg His Arg Leu Cys Pro Ala Ser Ser
580 585 590
Ala Trp His Ala Pro Pro Val Thr Thr Tyr Ala Ala Pro His Phe Phe
595 600 605
His Leu Asn Thr Lys Leu
610

<210> 80
<211> 114
<212> PRT
<213> Homo Sapiens

<400> 80
Met Ala Ser Val Ser Glu Leu Ala Cys Ile Tyr Ser Ala Leu Ile Leu
1 5 10 15
His Asp Asp Glu Val Thr Val Thr Glu Asp Lys Ile Asn Ala Leu Ile
20 25 30
Lys Ala Ala Gly Val Asn Val Glu Pro Phe Trp Pro Gly Leu Phe Ala
35 40 45
Lys Ala Leu Ala Asn Val Asn Ile Gly Ser Leu Ile Cys Asn Val Gly
50 55 60
Ala Gly Gly Pro Ala Pro Ala Ala Gly Ala Ala Pro Ala Gly Gly Pro
65 70 75 80
Ala Pro Ser Thr Ala Ala Ala Pro Ala Glu Glu Lys Lys Val Glu Ala
85 90 95
Lys Lys Glu Glu Ser Glu Glu Ser Asp Asp Asp Met Gly Phe Gly Leu
100 105 110
Phe Asp

<210> 81
<211> 596
<212> PRT

<213> Homo Sapiens

<400> 81

Met	Arg	Arg	Ala	His	Glu	Gly	Arg	Glu	Ile	Pro	Ser	Leu	Gly	Gly	Ala	1	5	10	15
Arg	Arg	Arg	Glu	Val	Leu	Gln	Ala	Gly	Arg	Ser	Gln	Arg	Ala	Ala	Gly	20	25	30	
Arg	Arg	Arg	Arg	Arg	Gln	Glu	Leu	Glu	Leu	Gly	Val	Gly	Ser	Gly	Arg	35	40	45	
Pro	Gly	Gly	Pro	Pro	Pro	Gly	Pro	Gly	Arg	Arg	Gly	Thr	Cys	Ala	Ala	50	55	60	
Ala	Leu	Pro	Pro	Glu	Trp	Pro	Arg	Arg	Arg	Thr	Gly	Leu	Pro	Arg	Arg	65	70	75	80
Gly	Pro	Arg	Pro	Pro	Leu	Ala	Met	Ala	Lys	Trp	Leu	Asn	Lys	Tyr	Phe	85	90	95	
Ser	Leu	Gly	Asn	Ser	Lys	Thr	Lys	Ser	Pro	Pro	Gln	Pro	Pro	Arg	Pro	100	105	110	
Asp	Tyr	Arg	Glu	Gln	Arg	Arg	Arg	Gly	Glu	Arg	Pro	Ser	Gln	Pro	Pro	115	120	125	
Gln	Ala	Val	Pro	Gln	Ala	Ser	Ser	Ala	Ala	Ser	Ala	Ser	Cys	Gly	Pro	130	135	140	
Ala	Thr	Ala	Ser	Cys	Phe	Ser	Ala	Ser	Ser	Gly	Ser	Leu	Pro	Asp	Asp	145	150	155	160
Ser	Gly	Ser	Thr	Ser	Asp	Leu	Ile	Arg	Ala	Tyr	Arg	Ala	Gln	Lys	Glu	165	170	175	
Arg	His	Phe	Gln	Asp	Pro	Tyr	Asn	Gly	Pro	Gly	Ser	Ser	Leu	Arg	Lys	180	185	190	
Leu	Arg	Ala	Met	Cys	Arg	Leu	Asp	Tyr	Cys	Gly	Gly	Ser	Gly	Glu	Pro	195	200	205	
Gly	Gly	Val	Gln	Arg	Ala	Phe	Ser	Ala	Ser	Ser	Ala	Ser	Gly	Ala	Ala	210	215	220	
Gly	Cys	Cys	Cys	Ala	Ser	Ser	Gly	Ala	Gly	Ala	Ala	Ala	Ser	Ser	Ser	225	230	235	240
Ser	Ser	Ser	Gly	Ser	Pro	His	Leu	Tyr	Arg	Ser	Ser	Ser	Glu	Arg	Arg	245	250	255	
Pro	Ala	Thr	Pro	Ala	Glu	Val	Arg	Tyr	Ile	Ser	Pro	Lys	His	Arg	Leu	260	265	270	
Ile	Lys	Val	Glu	Ser	Ala	Ala	Gly	Gly	Gly	Ala	Gly	Asp	Pro	Leu	Gly	275	280	285	
Gly	Ala	Cys	Ala	Gly	Gly	Arg	Thr	Trp	Ser	Pro	Thr	Ala	Cys	Gly	Gly	290	295	300	
Lys	Lys	Leu	Leu	Asn	Lys	Cys	Ala	Ala	Ser	Ala	Ala	Glu	Glu	Ser	Gly	305	310	315	320
Ala	Gly	Lys	Lys	Asp	Lys	Val	Thr	Ile	Ala	Asp	Asp	Tyr	Ser	Asp	Pro	325	330	335	
Phe	Asp	Ala	Lys	Asn	Asp	Leu	Lys	Ser	Lys	Ala	Gly	Lys	Gly	Glu	Ser	340	345	350	
Ala	Gly	Tyr	Met	Glu	Pro	Tyr	Glu	Ala	Gln	Arg	Ile	Met	Thr	Glu	Phe	355	360	365	
Gln	Arg	Gln	Glu	Ser	Val	Arg	Ser	Gln	His	Lys	Gly	Ile	Gln	Leu	Tyr	370	375	380	
Asp	Thr	Pro	Tyr	Glu	Pro	Glu	Gly	Gln	Ser	Val	Asp	Ser	Asp	Ser	Glu	385	390	395	400
Ser	Thr	Val	Ser	Pro	Arg	Leu	Arg	Glu	Ser	Lys	Leu	Pro	Gln	Asp	Asp	405	410	415	

Asp Arg Pro Ala Asp Glu Tyr Asp Gln Pro Trp Glu Trp Asn Arg Val
 420 425 430
 Thr Ser Pro Ala Leu Ala Ala Gln Phe Asn Gly Asn Glu Lys Arg Gln
 435 440 445
 Ser Ser Pro Ser Pro Ser Arg Asp Arg Arg Arg Gln Leu Arg Ala Pro
 450 455 460
 Gly Gly Gly Phe Lys Pro Ile Lys His Gly Ser Pro Glu Phe Cys Gly
 465 470 475 480
 Ile Leu Gly Glu Arg Val Asp Pro Ala Val Pro Leu Glu Lys Gln Ile
 485 490 495
 Trp Tyr His Gly Ala Ile Ser Arg Gly Asp Ala Glu Asn Leu Leu Arg
 500 505 510
 Leu Cys Lys Glu Cys Ser Tyr Leu Val Arg Asn Ser Gln Thr Ser Lys
 515 520 525
 His Asp Tyr Pro Leu Ser Leu Arg Ser Asn Gln Gly Phe Met His Met
 530 535 540
 Lys Leu Ala Lys Thr Lys Glu Lys Tyr Val Leu Gly Gln Asn Ser Pro
 545 550 555 560
 Pro Phe Asp Ser Val Pro Glu Val Ile His Tyr Tyr Thr Thr Arg Lys
 565 570 575
 Leu Pro Ile Lys Gly Ala Glu His Leu Ser Leu Leu Tyr Pro Val Ala
 580 585 590
 Val Arg Thr Leu
 595

<210> 82

<211> 207

<212> PRT

<213> Homo Sapiens

<400> 82

Met Ser Pro Leu Leu Arg Arg Leu Leu Leu Ala Ala Leu Leu Gln Leu
 1 5 10 15
 Ala Pro Ala Gln Ala Pro Val Ser Gln Pro Asp Ala Pro Gly His Gln
 20 25 30
 Arg Lys Val Val Ser Trp Ile Asp Val Tyr Thr Arg Ala Thr Cys Gln
 35 40 45
 Pro Arg Glu Val Val Val Pro Leu Thr Val Glu Leu Met Gly Thr Val
 50 55 60
 Ala Lys Gln Leu Val Pro Ser Cys Val Thr Val Gln Arg Cys Gly Gly
 65 70 75 80
 Cys Cys Pro Asp Asp Gly Leu Glu Cys Val Pro Thr Gly Gln His Gln
 85 90 95
 Val Arg Met Gln Ile Leu Met Ile Arg Tyr Pro Ser Ser Gln Leu Gly
 100 105 110
 Glu Met Ser Leu Glu Glu His Ser Gln Cys Glu Cys Arg Pro Lys Lys
 115 120 125
 Lys Asp Ser Ala Val Lys Pro Asp Arg Ala Ala Thr Pro His His Arg
 130 135 140
 Pro Gln Pro Arg Ser Val Pro Gly Trp Asp Ser Ala Pro Gly Ala Pro
 145 150 155 160
 Ser Pro Ala Asp Ile Thr His Pro Thr Pro Ala Pro Gly Pro Ser Ala
 165 170 175
 His Ala Ala Pro Ser Thr Thr Ser Ala Leu Thr Pro Gly Pro Ala Ala
 180 185 190

Ala Ala Ala Asp Ala Ala Ala Ser Ser Val Ala Lys Gly Gly Ala
 195 200 205

<210> 83
 <211> 429
 <212> PRT
 <213> Homo Sapiens

<400> 83
 Glu Cys Asp Val Met Thr Tyr Val Arg Glu Thr Cys Gly Cys Cys Asp
 1 5 10 15
 Cys Glu Lys Arg Cys Gly Ala Leu Asp Val Val Phe Val Ile Asp Ser
 20 25 30
 Ser Glu Ser Ile Gly Tyr Thr Asn Phe Thr Leu Glu Lys Asn Phe Val
 35 40 45
 Ile Asn Val Val Asn Arg Leu Gly Ala Ile Ala Lys Asp Pro Lys Ser
 50 55 60
 Glu Thr Gly Thr Arg Val Gly Val Val Gln Tyr Ser His Glu Gly Thr
 65 70 75 80
 Phe Glu Ala Ile Gln Leu Asp Asp Glu His Ile Asp Ser Leu Ser Ser
 85 90 95
 Phe Lys Glu Ala Val Lys Asn Leu Glu Trp Ile Ala Gly Gly Thr Trp
 100 105 110
 Thr Pro Ser Ala Leu Lys Phe Ala Tyr Asp Arg Leu Ile Lys Glu Ser
 115 120 125
 Arg Arg Gln Lys Thr Arg Val Phe Ala Val Val Ile Thr Asp Gly Arg
 130 135 140
 His Asp Pro Arg Asp Asp Asp Leu Asn Leu Arg Ala Leu Cys Asp Arg
 145 150 155 160
 Asp Val Thr Val Thr Ala Ile Gly Ile Gly Asp Met Phe His Glu Lys
 165 170 175
 His Glu Ser Glu Asn Leu Tyr Ser Ile Ala Cys Asp Lys Pro Gln Gln
 180 185 190
 Val Arg Asn Met Thr Leu Phe Ser Asp Leu Val Ala Glu Lys Phe Ile
 195 200 205
 Asp Asp Met Glu Asp Val Leu Cys Pro Asp Pro Gln Ile Val Cys Pro
 210 215 220
 Asp Leu Pro Cys Gln Thr Glu Leu Ser Val Ala Gln Cys Thr Gln Arg
 225 230 235 240
 Pro Val Asp Ile Val Phe Leu Leu Asp Gly Ser Glu Arg Leu Gly Glu
 245 250 255
 Gln Asn Phe His Lys Ala Arg Arg Phe Val Glu Gln Val Ala Arg Arg
 260 265 270
 Leu Thr Leu Ala Arg Arg Asp Asp Asp Pro Leu Asn Ala Arg Val Ala
 275 280 285
 Leu Leu Gln Phe Gly Gly Pro Gly Glu Gln Gln Val Ala Phe Pro Leu
 290 295 300
 Ser His Asn Leu Thr Ala Ile His Glu Ala Leu Glu Thr Thr Gln Tyr
 305 310 315 320
 Leu Asn Ser Phe Ser His Val Gly Ala Gly Val Val His Ala Ile Asn
 325 330 335
 Ala Ile Val Arg Ser Pro Arg Gly Gly Ala Arg Arg His Ala Glu Leu
 340 345 350
 Ser Phe Val Phe Leu Thr Asp Gly Val Thr Gly Asn Asp Ser Leu His
 355 360 365

Glu Ser Ala His Ser Met Arg Asn Glu Asn Val Val Pro Thr Val Leu
 370 375 380
 Ala Leu Gly Ser Asp Val Asp Met Asp Val Leu Thr Thr Leu Ser Leu
 385 390 395 400
 Gly Asp Arg Ala Ala Val Phe His Glu Lys Asp Tyr Asp Ser Leu Ala
 405 410 415
 Gln Pro Gly Phe Phe Asp Arg Phe Ile Arg Trp Ile Cys
 420 425

<210> 84
 <211> 113
 <212> PRT
 <213> Homo Sapiens

<400> 84
 Met Ser Ala Ser Val Val Ser Val Ile Ser Arg Phe Leu Glu Glu Tyr
 1 5 10 15
 Leu Ser Ser Thr Pro Gln Arg Leu Lys Leu Leu Asp Ala Tyr Leu Leu
 20 25 30
 Tyr Ile Leu Leu Thr Gly Ala Leu Gln Phe Gly Tyr Cys Leu Leu Val
 35 40 45
 Gly Thr Phe Pro Phe Asn Ser Phe Leu Ser Gly Phe Ile Ser Cys Val
 50 55 60
 Gly Ser Phe Ile Leu Ala Val Cys Leu Arg Ile Gln Ile Asn Pro Gln
 65 70 75 80
 Asn Lys Ala Asp Phe Gln Gly Ile Ser Pro Glu Arg Ala Phe Ala Asp
 85 90 95
 Phe Leu Phe Ala Ser Thr Ile Leu His Leu Val Val Met Asn Phe Val
 100 105 110
 Gly

<210> 85
 <211> 258
 <212> PRT
 <213> Homo Sapiens

<400> 85
 Met Ile Asn Ile Glu Ser Met Asp Thr Asp Lys Asp Asp Pro His Gly
 1 5 10 15
 Arg Leu Glu Tyr Thr Glu His Gln Gly Arg Ile Lys Asn Ala Arg Glu
 20 25 30
 Ala His Ser Gln Ile Glu Lys Arg Arg Arg Asp Lys Met Asn Ser Phe
 35 40 45
 Ile Asp Glu Leu Ala Ser Leu Val Pro Thr Cys Asn Ala Met Ser Arg
 50 55 60
 Lys Leu Asp Lys Leu Thr Val Leu Arg Met Ala Val Gln His Met Lys
 65 70 75 80
 Thr Leu Arg Gly Ala Thr Asn Pro Tyr Thr Glu Ala Asn Tyr Lys Pro
 85 90 95
 Thr Phe Leu Ser Asp Asp Glu Leu Lys His Leu Ile Leu Arg Ala Ala
 100 105 110
 Asp Gly Phe Leu Phe Val Val Gly Cys Asp Arg Gly Lys Ile Leu Phe
 115 120 125
 Val Ser Glu Ser Val Phe Lys Ile Leu Asn Tyr Ser Gln Asn Asp Leu

130 135 140
 Ile Gly Gln Ser Leu Phe Asp Tyr Leu His Pro Lys Asp Ile Ala Lys
 145 150 155 160
 Val Lys Glu Gln Leu Ser Ser Ser Asp Thr Ala Pro Arg Glu Arg Leu
 165 170 175
 Ile Asp Ala Lys Thr Gly Leu Pro Val Lys Thr Asp Ile Thr Pro Gly
 180 185 190
 Pro Ser Arg Leu Cys Ser Gly Ala Arg Arg Ser Phe Phe Cys Arg Met
 195 200 205
 Lys Cys Asn Arg Pro Ser Val Asn Val Glu Asp Lys Asn Phe Pro Ser
 210 215 220
 Thr Cys Ser Lys Lys Lys Ala Asp Arg Lys Ala Phe Cys Thr Ile His
 225 230 235 240
 Ser Thr Gly Tyr Phe Gly Ile Phe Thr Thr Arg Thr Ser Arg His Ile
 245 250 255
 Val Leu

<210> 86

<211> 569

<212> PRT

<213> Homo Sapiens

<400> 86

Met Ser Thr Met Val Tyr Ile Lys Glu Asp Lys Leu Glu Lys Leu Thr
 1 5 10 15
 Gln Asp Glu Ile Ile Ser Lys Thr Lys Gln Val Ile Gln Gly Leu Glu
 20 25 30
 Ala Leu Lys Asn Glu His Asn Ser Ile Leu Gln Ser Leu Leu Glu Thr
 35 40 45
 Leu Lys Cys Leu Lys Lys Asp Asp Glu Ser Asn Leu Val Glu Glu Lys
 50 55 60
 Ser Asn Met Ile Arg Lys Ser Leu Glu Met Leu Glu Leu Gly Leu Ser
 65 70 75 80
 Glu Ala Gln Val Met Met Ala Leu Ser Asn His Leu Asn Ala Val Glu
 85 90 95
 Ser Glu Lys Gln Lys Leu Arg Ala Gln Val Arg Arg Leu Cys Gln Glu
 100 105 110
 Asn Gln Trp Leu Arg Asp Glu Leu Ala Asn Thr Gln Gln Lys Leu Gln
 115 120 125
 Lys Ser Glu Gln Ser Val Ala Gln Leu Glu Glu Glu Lys Lys His Leu
 130 135 140
 Glu Phe Met Asn Gln Leu Lys Lys Tyr Asp Asp Asp Ile Ser Pro Ser
 145 150 155 160
 Glu Asp Lys Asp Thr Asp Ser Thr Lys Glu Pro Leu Asp Asp Leu Phe
 165 170 175
 Pro Asn Asp Glu Asp Asp Pro Gly Gln Gly Ile Gln Gln Gln His Ser
 180 185 190
 Ser Ala Ala Ala Ala Ala Gln Gln Gly Gly Tyr Glu Ile Pro Ala Arg
 195 200 205
 Leu Arg Thr Leu His Asn Leu Val Ile Gln Tyr Ala Ser Gln Gly Arg
 210 215 220
 Tyr Glu Val Ala Val Pro Leu Cys Lys Gln Ala Leu Glu Asp Leu Glu
 225 230 235 240
 Lys Thr Ser Gly His Asp His Pro Asp Val Ala Thr Met Leu Asn Ile

245 250 255
 Leu Ala Leu Val Tyr Arg Asp Gln Asn Lys Tyr Lys Asp Ala Ala Asn
 260 265 270
 Leu Leu Asn Asp Ala Leu Ala Ile Arg Glu Lys Thr Leu Gly Lys Asp
 275 280 285
 His Pro Ala Val Ala Ala Thr Leu Asn Asn Leu Ala Val Leu Tyr Gly
 290 295 300
 Lys Arg Gly Lys Tyr Lys Glu Ala Glu Pro Leu Cys Lys Arg Ala Leu
 305 310 315 320
 Glu Ile Arg Glu Lys Val Leu Gly Lys Asp His Pro Asp Val Ala Lys
 325 330 335
 Gln Leu Asn Asn Leu Ala Leu Leu Cys Gln Asn Gln Gly Lys Tyr Glu
 340 345 350
 Glu Val Glu Tyr Tyr Tyr Gln Arg Ala Leu Glu Ile Tyr Gln Thr Lys
 355 360 365
 Leu Gly Pro Asp Asp Pro Asn Val Ala Lys Thr Lys Asn Asn Leu Ala
 370 375 380
 Ser Cys Tyr Leu Lys Gln Gly Lys Phe Lys Gln Ala Glu Thr Leu Tyr
 385 390 395 400
 Lys Glu Ile Leu Thr Arg Ala His Glu Arg Glu Phe Gly Ser Val Asp
 405 410 415
 Asp Glu Asn Lys Pro Ile Trp Met His Ala Glu Glu Arg Glu Glu Cys
 420 425 430
 Lys Gly Lys Gln Lys Asp Gly Thr Ser Phe Gly Glu Tyr Gly Gly Trp
 435 440 445
 Tyr Lys Ala Cys Lys Val Asp Ser Pro Thr Val Thr Thr Thr Leu Lys
 450 455 460
 Asn Leu Gly Ala Leu Tyr Arg Arg Gln Gly Lys Phe Glu Ala Ala Glu
 465 470 475 480
 Thr Leu Glu Glu Ala Ala Met Arg Ser Arg Lys Gln Gly Leu Asp Asn
 485 490 495
 Val His Lys Gln Arg Val Ala Glu Val Leu Asn Asp Pro Glu Asn Met
 500 505 510
 Glu Lys Arg Arg Ser Arg Glu Ser Leu Asn Val Asp Val Val Lys Tyr
 515 520 525
 Glu Ser Gly Pro Asp Gly Gly Glu Glu Val Ser Met Ser Val Glu Trp
 530 535 540
 Asn Gly Gly Val Ser Gly Arg Ala Ser Phe Cys Gly Lys Arg Gln Gln
 545 550 555 560
 Gln Gln Trp Pro Gly Arg Arg His Arg
 565

<210> 87

<211> 736

<212> PRT

<213> Homo Sapiens

<400> 87

Met Glu Ala Leu Ile Pro Val Ile Asn Lys Leu Gln Asp Val Phe Asn
 1 5 10 15
 Thr Val Gly Ala Asp Ile Ile Gln Leu Pro Gln Ile Val Val Val Gly
 20 25 30
 Thr Gln Ser Ser Gly Lys Ser Ser Val Leu Glu Ser Leu Val Gly Arg
 35 40 45
 Asp Leu Leu Pro Arg Gly Thr Gly Ile Val Thr Arg Arg Pro Leu Ile

50	55	60
Leu Gln Leu Val His	Val Thr Gln Glu Asp Lys	Arg Lys Thr Thr Gly
65	70	75
Glu Glu Asn Gly Val	Glu Ala Glu Glu Trp Gly Lys Phe	Leu His Thr
85	90	95
Lys Asn Lys Leu Tyr Thr	Asp Phe Asp Glu Ile Arg Gln	Glu Ile Glu
100	105	110
Asn Glu Thr Glu Arg Ile	Ser Gly Asn Asn Lys Gly Val	Ser Pro Glu
115	120	125
Pro Ile His Leu Lys Ile	Phe Ser Pro Asn Val Val	Asn Leu Thr Leu
130	135	140
Val Asp Leu Pro Gly Met	Thr Lys Val Pro Val Gly	Asp Gln Pro Lys
145	150	155
Asp Ile Glu Leu Gln Ile	Arg Glu Leu Ile Leu Arg	Phe Ile Ser Asn
165	170	175
Pro Asn Ser Ile Ile Leu	Ala Val Thr Ala Ala Asn	Thr Asp Met Ala
180	185	190
Thr Ser Glu Ala Leu Lys	Ile Ser Arg Glu Val Asp	Pro Asp Gly Arg
195	200	205
Arg Thr Leu Ala Val Ile	Thr Lys Leu Asp Leu Met	Asp Ala Gly Thr
210	215	220
Asp Ala Met Asp Val Leu	Met Gly Arg Val Ile Pro	Val Lys Leu Gly
225	230	235
Ile Ile Gly Val Val Asn	Arg Ser Gln Leu Asp Ile	Asn Asn Lys Lys
245	250	255
Ser Val Thr Asp Ser Ile	Arg Asp Glu Tyr Ala Phe	Leu Gln Lys Lys
260	265	270
Tyr Pro Ser Leu Ala Asn	Arg Asn Gly Thr Lys Tyr	Leu Ala Arg Thr
275	280	285
Leu Asn Arg Leu Leu Met	His His Ile Arg Asp Cys	Leu Pro Glu Leu
290	295	300
Lys Thr Arg Ile Asn Val	Leu Ala Ala Gln Tyr Gln	Ser Leu Leu Asn
305	310	315
Ser Tyr Gly Glu Pro Val	Asp Asp Lys Ser Ala Thr	Leu Leu Gln Leu
325	330	335
Ile Thr Lys Phe Ala Thr	Glu Tyr Cys Asn Thr Ile	Glu Gly Thr Ala
340	345	350
Lys Tyr Ile Glu Thr Ser	Glu Leu Cys Gly Gly Ala	Arg Ile Cys Tyr
355	360	365
Ile Phe His Glu Thr Phe	Gly Arg Thr Leu Glu Ser	Val Asp Pro Leu
370	375	380
Gly Gly Leu Asn Thr Ile	Asp Ile Leu Thr Ala Ile	Arg Asn Ala Thr
385	390	395
Gly Pro Arg Pro Ala Leu	Phe Val Pro Glu Val Ser	Phe Glu Leu Leu
405	410	415
Val Lys Arg Gln Ile Lys	Arg Leu Glu Glu Pro Ser	Leu Arg Cys Val
420	425	430
Glu Leu Val His Glu Glu	Met Gln Arg Ile Ile Gln	His Cys Ser Asn
435	440	445
Tyr Ser Thr Gln Glu Leu	Leu Arg Phe Pro Lys Leu	His Asp Ala Ile
450	455	460
Val Glu Val Val Thr Cys	Leu Leu Arg Lys Arg Leu	Pro Val Thr Asn
465	470	475
Glu Met Val His Asn Leu	Val Ala Ile Glu Leu Ala	Tyr Ile Asn Thr
485	490	495

Lys His Pro Asp Phe Ala Asp Ala Cys Gly Leu Met Asn Asn Asn Ile
 500 505 510
 Glu Glu Gln Arg Arg Asn Arg Leu Ala Arg Glu Leu Pro Ser Ala Val
 515 520 525
 Ser Arg Asp Lys Ser Ser Lys Val Pro Ser Ala Leu Ala Pro Ala Ser
 530 535 540
 Gln Glu Pro Ser Pro Ala Ala Ser Ala Glu Ala Asp Gly Lys Leu Ile
 545 550 555 560
 Gln Asp Ser Arg Arg Glu Thr Lys Asn Val Ala Ser Gly Gly Gly Gly
 565 570 575
 Val Gly Asp Gly Val Gln Glu Pro Thr Thr Gly Asn Trp Arg Gly Met
 580 585 590
 Leu Lys Thr Ser Lys Ala Glu Glu Leu Leu Ala Glu Glu Lys Ser Lys
 595 600 605
 Pro Ile Pro Ile Met Pro Ala Ser Pro Gln Lys Gly His Ala Val Asn
 610 615 620
 Leu Leu Asp Val Pro Val Pro Val Ala Arg Lys Leu Ser Ala Arg Glu
 625 630 635 640
 Gln Arg Asp Cys Glu Val Ile Glu Arg Leu Ile Lys Ser Tyr Phe Leu
 645 650 655
 Ile Val Arg Lys Asn Ile Gln Asp Ser Val Pro Lys Ala Val Met His
 660 665 670
 Phe Leu Val Asn His Val Lys Asp Thr Leu Gln Ser Glu Leu Val Gly
 675 680 685
 Gln Leu Tyr Lys Ser Ser Leu Leu Asp Asp Leu Leu Thr Glu Ser Glu
 690 695 700
 Asp Met Ala Gln Arg Arg Lys Glu Ala Ala Asp Met Leu Lys Ala Leu
 705 710 715 720
 Gln Gly Ala Ser Gln Ile Ile Ala Glu Ile Arg Glu Thr His Leu Trp
 725 730 735

<210> 88

<211> 37

<212> PRT

<213> Homo Sapiens

<400> 88

Met Gly Asp His Ala Trp Ser Phe Leu Lys Asp Phe Leu Ala Gly Gly
 1 5 10 15
 Val Ala Ala Ala Val Ser Lys Thr Ala Val Ala Pro Ile Glu Arg Val
 20 25 30
 Lys Leu Leu Leu Gln
 35

<210> 89

<211> 1381

<212> DNA

<213> Homo Sapiens

<400> 89

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 gcgttcgtgt ccgagttctc tgcaggtcnc tantttccc gtagttcanc tgcncatgaa 120
 tanaacagca atgagagccn ctncaaaga ctttgaaaat tcaactgaatc nagtgaaact 180
 ctngaaaaag gatccangaa acgaaatgaa nctnaaactc tncgcgctat atnancangc 240
 cncgtgaanga cttgtntcat gccnaacca nggtgtntttg acttgatcna caaggggcca 300

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atgggacaca tgggaatgcc ttggcancct gccnaagaa ctgccaggca naactatgtg 360
gatttggtgt ccantttgan tccntccttg gaatcctcna atcnnngtga ncctggaaca 420
nacaggaaat ccactgggtt tgaaactctg gtggtgacct ccgaagatgg catcacaag 480
atcatgttca accggcccaa aaagaaaaat gccataaaca ctgagatgta tcatgaaatt 540
atgctgtcac ttaaagctgc cagcaaggat gactcaatca tcaactgttt aacaggaaat 600
ggtgactatt acagtagtgg gaatgatctg actaacttca ctgatattcc cctggttga 660
gtagaggaga aagctaaaaa taatgccgtt ttactgaggg aatttgtggg ctgttttata 720
gattttccta agcctctgat tgcagtgggc aatgggtccag ctgtgggcat ctccgtcacc 780
ctccttgggc tattogatgc cgtgtatgca tctgacaggg caacatttca tacaccattt 840
agtcacctag gccaaagtcc ggaaggatgc tctcttaca cttttccgaa gataatgagc 900
ccagccaagg caacagagat gcttattttt ggaaagaagt taacagcggg agaggcatgt 960
gctcaaggac ttgttactga agttttccct gatagcactt ttcagaaaga agtctggacc 1020
aggctgaagg catttgcaaa gcttccccca aatgccttga gaatttcaaa agaggtaatc 1080
aggaaaagag agagagaaaa actacacgct gttaatgctg aagaatgcaa tgtccttcag 1140
ggaagatggc tatcagatga atgcacaaat gctgtggtga acttcttacc cagaaaatca 1200
aaactgtgat gaccactaca gcagagtaaa gcatgtccaa ggaaggatgt gctgttacct 1260
ctgatttcca gtactggaac taaataagct tcattgtgcc ttttgtagt ctagaatatc 1320
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a
1381

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<210> 90
 <211> 298
 <212> PRT
 <213> Homo Sapiens

<400> 90

Thr	Cys	Met	Pro	Pro	Val	Phe	Asp	Leu	Ile	Lys	Gly	Pro	Met	Gly	His
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Met	Glu	Cys	Pro	Trp	Pro	Ala	Arg	Thr	Ala	Arg	Asn	Tyr	Val	Asp	Leu
			20					25					30		
Val	Ser	Leu	Pro	Ser	Leu	Glu	Ser	Ser	Asn	Val	Pro	Gly	Thr	Arg	Lys
		35					40					45			
Ser	Thr	Gly	Phe	Glu	Thr	Leu	Val	Val	Thr	Ser	Glu	Asp	Gly	Ile	Thr
	50				55						60				
Lys	Ile	Met	Phe	Asn	Arg	Pro	Lys	Lys	Lys	Asn	Ala	Ile	Asn	Thr	Glu
65				70					75					80	
Met	Tyr	His	Glu	Ile	Met	Arg	Ala	Leu	Lys	Ala	Ala	Ser	Lys	Asp	Asp
			85					90						95	
Ser	Ile	Ile	Thr	Val	Leu	Thr	Gly	Asn	Gly	Asp	Tyr	Tyr	Ser	Ser	Gly
			100				105						110		
Asn	Asp	Leu	Thr	Asn	Phe	Thr	Asp	Ile	Pro	Pro	Gly	Gly	Val	Glu	Glu
		115				120						125			
Lys	Ala	Lys	Asn	Asn	Ala	Val	Leu	Leu	Arg	Glu	Phe	Val	Gly	Cys	Phe
	130				135						140				
Ile	Asp	Phe	Pro	Lys	Pro	Leu	Ile	Ala	Val	Val	Asn	Gly	Pro	Ala	Val
145				150					155					160	
Gly	Ile	Ser	Val	Thr	Leu	Leu	Gly	Leu	Phe	Asp	Ala	Val	Tyr	Ala	Ser
			165				170						175		
Asp	Arg	Ala	Thr	Phe	His	Thr	Pro	Phe	Ser	His	Leu	Gly	Gln	Ser	Pro
		180				185						190			
Glu	Gly	Cys	Ser	Ser	Tyr	Thr	Phe	Pro	Lys	Ile	Met	Ser	Pro	Ala	Lys
		195				200					205				
Ala	Thr	Glu	Met	Leu	Ile	Phe	Gly	Lys	Lys	Leu	Thr	Ala	Gly	Glu	Ala
	210				215						220				
Cys	Ala	Gln	Leu	Val	Thr	Glu	Val	Phe	Pro	Asp	Ser	Thr	Phe	Gln	Lys

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<210> 91
<211> 1514
<212> DNA
<213> Homo Sapiens
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<210> 92
<211> 407
<212> PRT
<213> Homo Sapiens
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-62-

Thr Ala Met Ser Asp Ser Tyr Leu Pro Ser Tyr Tyr Ser Pro Ser Ile
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 Gly Phe Ser Tyr Ser Leu Gly Glu Ala Ala Trp Ser Thr Gly Gly Asp
 65 70 75 80
 Thr Ala Met Pro Tyr Leu Thr Ser Tyr Gly Gln Leu Ser Asn Gly Glu
 85 90 95
 Pro His Phe Leu Pro Asp Ala Met Phe Gly Gln Pro Gly Ala Leu Gly
 100 105 110
 Ser Thr Pro Phe Leu Gly Gln His Gly Phe Asn Phe Phe Pro Ser Gly
 115 120 125
 Ile Asp Phe Ser Ala Trp Gly Asn Asn Ser Ser Gln Gly Gln Ser Thr
 130 135 140
 Gln Ser Ser Gly Tyr Ser Ser Asn Tyr Ala Tyr Ala Pro Ser Ser Leu
 145 150 155 160
 Gly Gly Ala Met Ile Asp Gly Gln Ser Ala Phe Ala Asn Glu Thr Leu
 165 170 175
 Asn Lys Ala Pro Gly Met Asn Thr Ile Asp Gln Gly Met Ala Ala Leu
 180 185 190
 Lys Leu Gly Ser Thr Glu Val Ala Ser Asn Val Pro Lys Val Val Gly
 195 200 205
 Ser Ala Val Gly Ser Gly Ser Ile Thr Ser Asn Ile Val Ala Ser Asn
 210 215 220
 Ser Leu Pro Pro Ala Thr Ile Ala Pro Pro Lys Pro Ala Ser Trp Ala
 225 230 235 240
 Asp Ile Ala Ser Lys Pro Ala Lys Gln Gln Pro Lys Leu Lys Thr Lys
 245 250 255
 Asn Gly Ile Ala Gly Ser Ser Leu Pro Pro Pro Pro Ile Lys His Asn
 260 265 270
 Met Asp Ile Gly Thr Trp Asp Asn Lys Gly Pro Val Ala Lys Ala Pro
 275 280 285
 Ser Gln Ala Leu Val Gln Asn Ile Gly Gln Pro Thr Gln Gly Ser Pro
 290 295 300
 Gln Pro Val Gly Gln Gln Ala Asn Asn Ser Pro Pro Val Ala Gln Ala
 305 310 315 320
 Ser Val Gly Gln Gln Thr Gln Pro Leu Pro Pro Pro Pro Gln Pro
 325 330 335
 Ala Gln Leu Ser Val Gln Gln Gln Ala Ala Gln Pro Thr Arg Trp Val
 340 345 350
 Ala Pro Arg Asn Arg Gly Ser Gly Phe Gly His Asn Gly Val Asp Gly
 355 360 365
 Asn Gly Val Gly Gln Ser Gln Ala Gly Ser Gly Ser Thr Pro Ser Glu
 370 375 380
 Pro His Pro Val Leu Glu Lys Leu Arg Ser Ile Asn Asn Tyr Asn Pro
 385 390 395 400
 Lys Asp Phe Asp Trp Glu Ile
 405

<210> 93

<211> 2236

<212> DNA

<213> Homo Sapiens

<400> 93

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 gggctgtgca acgacgcagc tggacctggc ccagccatgg accgaaaagt ggccccagaa

60
120

ttccggcata aggtggattt tctgattgaa aatgatgcag agaaggacta tctctatgat 180
 gtgctgcgaa tgtaccacca gaccatggac gtggccgtgc tegtgggaga cctgaagctg 240
 gtcacatcatg aaccagccg tctgcctctg tttgatgcc ttcggccgct gatccactg 300
 aagcaccagg tggaaataga tcagctgacc ccccgccgct ccaggaagct gaaggagggtg 360
 cgtctggacc gtctgcaccc cgaaggccctc ggccctgagt tgcgtggtgg cctggagttt 420
 ggctgtgggc tcttcatctc ccacctcatc aaaggcggtc aggcagacag cgtcgggctc 480
 caggtagggg acgagatcgt ccggatcaat ggatattcca tctcctcctg taccatgag 540
 gaggtcatca acctcattcg aaccaagaaa actgtgtcca tcaaagttag acacatcggc 600
 ctgatccccg tgaagaagctc tcctgatgag cccctcactt ggcagtatgt ggatcagttt 660
 gtgtcggaa ctggggggcgt gcgaggcagc ctgggctccc ctggaaatcg ggaaaacaag 720
 gagaagaagg tcttcatcag cctggtaggc tcccgaggcc ttggctgcag catttccagc 780
 ggccccatcc agaagcctgg catctttatc agccatgtga aacctggctc cctgtctgct 840
 gaggtgggat tggagatagg ggaccagatt gtgcaagtca atggcgtcga cttctctaac 900
 ctggatcaca aggaggctgt aaatgtgctg aaaaatagcc gcagcctgac catctccatt 960
 gtagctgcag ctggccggga gctgttcatg acagaccggg agcggctggc agaggcgagg 1020
 cagcgtgagc tgcagcggca ggagcttctc atgcagaagc ggctggcgat ggagtccaac 1080
 aagatcctcc aggagcagca ggagatggag cggcaaagga gaaaagaaat tgcccagaag 1140
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 aagttaaga agcaattggga agaagactgg ggctcaaagg aacagctact cttgcctaaa 1260
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 gaacctgagc tcgagcccg cagtgacctg gatggaggca cggaggagca gggagagcag 1380
 gatttccgga aatatgagga aggctttgac ccctactcta tgttcacccc agagcagatc 1440
 atggggaagg atgtccggct cctacgcac aagaaggagg gatccttaga cctggccctg 1500
 gaaggcgggtg tggactcccc cattgggaag gtggctggtt ctgctgtgta tgagcgggga 1560
 gctgctgagc ggcattggtg catttgtgaaa ggggacgaga tcatggcaat caacggcaag 1620
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 ggccggggact ggatcgacct tgtggttgc gtctgcccc caaaggagta tgacgatgag 1740
 ctgaccttct tctgaagtc caaaagggga aaccaaattc acgcgttagg aaacagttag 1800
 ctccggcccc acctcgtgaa cacaagcct cggaccagcc ttgagagagg ccacatgaca 1860
 cacaccagat ggcacacctt ggacctgaat ctatcaccca ggaatctcaa actccctttg 1920
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 ggaaagggag cagccagccg tttgggagaa gatctcaagg atccagactc tcattccttt 2040
 cctctggccc agtgaatttg gtctctccca gctttggggg actccttctc tgaaccctaa 2100
 taagacccca ctggagtctc tctctctcca tccctctctc ctgcccctct ctctaattgc 2160
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 ttccagctta aaaaaa 2236

<210> 94

<211> 652

<212> PRT

<213> Homo Sapiens

<400> 94

Met	Asp	Arg	Lys	Val	Ala	Arg	Glu	Phe	Arg	His	Lys	Val	Asp	Phe	Leu
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Ile	Glu	Asn	Asp	Ala	Glu	Lys	Asp	Tyr	Leu	Tyr	Asp	Val	Leu	Arg	Met
			20					25					30		
Tyr	His	Gln	Thr	Met	Asp	Val	Ala	Val	Leu	Val	Gly	Asp	Leu	Lys	Leu
			35					40					45		
Val	Ile	Asn	Glu	Pro	Ser	Arg	Leu	Pro	Leu	Phe	Asp	Ala	Ile	Arg	Pro
			50					55				60			
Leu	Ile	Pro	Leu	Lys	His	Gln	Val	Glu	Tyr	Asp	Gln	Leu	Thr	Pro	Arg
65					70					75				80	
Arg	Ser	Arg	Lys	Leu	Lys	Glu	Val	Arg	Leu	Asp	Arg	Leu	His	Pro	Glu
			85						90					95	

Gly Leu Gly Leu Ser Val Arg Gly Gly Leu Glu Phe Gly Cys Gly Leu
 100 105 110
 Phe Ile Ser His Leu Ile Lys Gly Gly Gln Ala Asp Ser Val Gly Leu
 115 120 125
 Gln Val Gly Asp Glu Ile Val Arg Ile Asn Gly Tyr Ser Ile Ser Ser
 130 135 140
 Cys Thr His Glu Glu Val Ile Asn Leu Ile Arg Thr Lys Lys Thr Val
 145 150 155 160
 Ser Ile Lys Val Arg His Ile Gly Leu Ile Pro Val Lys Ser Ser Pro
 165 170 175
 Asp Glu Pro Leu Thr Trp Gln Tyr Val Asp Gln Phe Val Ser Glu Ser
 180 185 190
 Gly Gly Val Arg Gly Ser Leu Gly Ser Pro Gly Asn Arg Glu Asn Lys
 195 200 205
 Glu Lys Lys Val Phe Ile Ser Leu Val Gly Ser Arg Gly Leu Gly Cys
 210 215 220
 Ser Ile Ser Ser Gly Pro Ile Gln Lys Pro Gly Ile Phe Ile Ser His
 225 230 235 240
 Val Lys Pro Gly Ser Leu Ser Ala Glu Val Gly Leu Glu Ile Gly Asp
 245 250 255
 Gln Ile Val Glu Val Asn Gly Val Asp Phe Ser Asn Leu Asp His Lys
 260 265 270
 Glu Ala Val Asn Val Leu Lys Asn Ser Arg Ser Leu Thr Ile Ser Ile
 275 280 285
 Val Ala Ala Ala Gly Arg Glu Leu Phe Met Thr Asp Arg Glu Arg Leu
 290 295 300
 Ala Glu Ala Arg Gln Arg Glu Leu Gln Arg Gln Glu Leu Leu Met Gln
 305 310 315 320
 Lys Arg Leu Ala Met Glu Ser Asn Lys Ile Leu Gln Glu Gln Gln Glu
 325 330 335
 Met Glu Arg Gln Arg Arg Lys Glu Ile Ala Gln Lys Ala Ala Glu Glu
 340 345 350
 Asn Glu Arg Tyr Arg Lys Glu Met Glu Gln Ile Val Glu Glu Glu Glu
 355 360 365
 Lys Phe Lys Lys Gln Trp Glu Glu Asp Trp Gly Ser Lys Glu Gln Leu
 370 375 380
 Leu Leu Pro Lys Thr Ile Thr Ala Glu Val His Pro Val Pro Leu Arg
 385 390 395 400
 Lys Pro Lys Tyr Asp Gln Gly Val Glu Pro Glu Leu Glu Pro Ala Asp
 405 410 415
 Asp Leu Asp Gly Gly Thr Glu Glu Gln Gly Glu Gln Asp Phe Arg Lys
 420 425 430
 Tyr Glu Glu Gly Phe Asp Pro Tyr Ser Met Phe Thr Pro Glu Gln Ile
 435 440 445
 Met Gly Lys Asp Val Arg Leu Leu Arg Ile Lys Lys Glu Gly Ser Leu
 450 455 460
 Asp Leu Ala Leu Glu Gly Gly Val Asp Ser Pro Ile Gly Lys Val Val
 465 470 475 480
 Val Ser Ala Val Tyr Glu Arg Gly Ala Ala Glu Arg His Gly Gly Ile
 485 490 495
 Val Lys Gly Asp Glu Ile Met Ala Ile Asn Gly Lys Ile Val Thr Asp
 500 505 510
 Tyr Thr Leu Ala Glu Ala Asp Ala Ala Leu Gln Lys Ala Trp Asn Gln
 515 520 525
 Gly Gly Asp Trp Ile Asp Leu Val Val Ala Val Cys Pro Pro Lys Glu

530	535	540
Tyr Asp Asp Glu Leu Thr Phe Leu Leu Lys Ser Lys Arg Gly Asn Gln		
545	550	555
Ile His Ala Leu Gly Asn Ser Glu Leu Arg Pro His Leu Val Asn Thr		560
	565	570
Lys Pro Arg Thr Ser Leu Glu Arg Gly His Met Thr His Thr Arg Trp		575
	580	585
His Pro Trp Asp Leu Asn Leu Ser Pro Arg Asn Leu Lys Leu Pro Leu		590
	595	600
Ala Leu Asn Gln Gly Gln Ile Arg Asn Ser Ser Gly His Phe Phe Glu		605
	610	615
Gly Gln Cys Gly Gly Lys Gly Ala Ala Ser Arg Leu Gly Glu Asp Leu		620
625	630	635
Lys Asp Pro Asp Ser His Ser Phe Pro Leu Ala Gln		640
	645	650

<210> 95
 <211> 831
 <212> DNA
 <213> Homo Sapiens

<400> 95

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aaaacnattg	cagaaaacat	ttagattnta	tgaaatatat	aatnanancc	aaaanccatt	180
tgaanttaat	nganccttac	ctgtcntcac	taaatcaggg	ttntctgcgc	caccnaaggg	240
cngcccaneg	cctgctgtgt	tggcttanta	ggcctnagca	tangggcagn	tgcaatcctt	300
tcctcctnng	gcgccanattg	ggcttctgga	anaacccttn	ccttatcccc	ancgcaaggc	360
ggccctctcc	ctgccctnaa	aggaaacctc	ntggacncag	ggaatatang	gccaccttga	420
agggtggact	ggctatcntg	gaagatcaga	taccaccaag	caatttgag	acagttctcg	480
ttgagaataa	ccacggtttc	catgaaaaga	cagcagcgct	gaagcttgag	gccgagggcg	540
aggccatgga	agatgcagcc	gcgccaggga	acgaccgagg	cggcacacag	gagccagccc	600
cagtgcctgc	tgagccggtt	gacaacacta	cctacaagaa	cctgcagcat	catgactaca	660
gcacgtacac	cttcttagac	ctcaacctcg	aactctcaaa	attcaggatg	cctcagccct	720
cctcagggcg	ggagtcacct	cgacactgag	ggccctcggt	gtgaagatga	accttcacc	780
gtcttcaactg	catcctggag	tgcaaaaata	aaatccactc	aagagtcaaa	a	831

<210> 96
 <211> 184
 <212> PRT
 <213> Homo Sapiens

<400> 96

Arg Lys Asn Cys Arg Lys His Leu Asp Met Lys Tyr Ile Lys His Leu	
1	5
Leu Pro Tyr Leu Ser Ser Leu Asn Gln Gly Leu Arg His Arg Ala Ala	
20	25
Arg Leu Leu Cys Trp Leu Arg Pro His Gly Cys Asn Pro Phe Leu Leu	
35	40
Arg Met Gly Phe Trp Asn Pro Leu Ile Pro Ala Arg Arg Pro Leu Pro	
50	55
Cys Pro Arg Lys Pro Gly Arg Glu Tyr Ala Thr Leu Lys Gly Gly Leu	
65	70
Ala Ile Glu Asp Gln Ile Pro Pro Ser Asn Leu Glu Thr Val Pro Val	
85	90
	95

Glu Asn Asn His Gly Phe His Glu Lys Thr Ala Ala Leu Lys Leu Glu
 100 105 110
 Ala Glu Gly Glu Ala Met Glu Asp Ala Ala Ala Pro Gly Asn Asp Arg
 115 120 125
 Gly Gly Thr Gln Glu Pro Ala Pro Val Pro Ala Glu Pro Phe Asp Asn
 130 135 140
 Thr Thr Tyr Lys Asn Leu Gln His His Asp Tyr Ser Thr Tyr Thr Phe
 145 150 155 160
 Leu Asp Leu Asn Leu Glu Leu Ser Lys Phe Arg Met Pro Gln Pro Ser
 165 170 175
 Ser Gly Arg Glu Ser Pro Arg His
 180

<210> 97
 <211> 1008
 <212> DNA
 <213> Homo Sapiens

<400> 97
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 ccaaccaggg ctacatgcct tatttaaaca gggtcatttt ggaaaagggtc caagacaact 180
 ttgacaagat tgaattcaat aggatgtgtt ggaccctctg tgtcaaaaaa aacctcacia 240
 agaatcccct gctcattaca gaagaanatg catttaaaat atgggttatt ttcaactttt 300
 tatctgagga caagtatcca ttaattattg tgtcagaana gattgaatac ctgcttaaga 360
 agcttacaga agctatggga ggaggttggc agcaagaaca atttgaacat tataaaatca 420
 actttgatga cagtaaaaaat ggcctttctg catgggaact tattgagctt attggaaatg 480
 gacagtttag caaaggcatg gaccggcaga ctgtgtctat ggcaattaat gaagtcttta 540
 atgaacttat attagatgtg ttaaagcagg gttacatgat gaaaaagggc cacagacgga 600
 aaaactggac tgaacgatgg tttgtactaa aaccaacat aatttcttac tatgtgagtg 660
 aggatctgaa ggataagaaa ggagacattc tcttgatga aaattgctgt gtagagtcct 720
 tgcctgacaa agatggaaaag aaatgccttt ttctcgtaaa atgttttgat aagacttttg 780
 aaatcagtgc ttcagataag aanaanaaac aggagtggat tcaagccatt cattctacta 840
 ttcactctgt gaagctgncc agccctccac canacaaaga agccnccag cttctnaaan 900
 aactccggna gaatcatctg gctgaacaag angaactgga gcgacaaatg aangaactcc 960
 aagcccgcga atgaaagcaa ncagcaagag ctggaaggcc ttncggaa 1008

<210> 98
 <211> 312
 <212> PRT
 <213> Homo Sapiens

<400> 98
 Lys Val Ser Lys Ser Gln Leu Lys Val Leu Ser His Asn Leu Cys Thr
 1 5 10 15
 Val Leu Lys Val Pro His Asp Pro Val Ala Leu Glu Glu His Phe Arg
 20 25 30
 Asp Asp Asp Glu Gly Pro Val Ser Asn Gln Gly Tyr Met Pro Tyr Leu
 35 40 45
 Asn Arg Phe Ile Leu Glu Lys Val Gln Asp Asn Phe Asp Lys Ile Glu
 50 55 60
 Phe Asn Arg Met Cys Trp Thr Leu Cys Val Lys Lys Asn Leu Thr Lys
 65 70 75 80
 Asn Pro Leu Leu Ile Thr Glu Glu Ala Phe Lys Ile Trp Val Ile Phe
 85 90 95

Asn Phe Leu Ser Glu Asp Lys Tyr Pro Leu Ile Ile Val Ser Glu Ile
 100 105 110
 Glu Tyr Leu Leu Lys Lys Leu Thr Glu Ala Met Gly Gly Gly Trp Gln
 115 120 125
 Gln Glu Gln Phe Glu His Tyr Lys Ile Asn Phe Asp Asp Ser Lys Asn
 130 135 140
 Gly Leu Ser Ala Trp Glu Leu Ile Glu Leu Ile Gly Asn Gly Gln Phe
 145 150 155 160
 Ser Lys Gly Met Asp Arg Gln Thr Val Ser Met Ala Ile Asn Glu Val
 165 170 175
 Phe Asn Glu Leu Ile Leu Asp Val Leu Lys Gln Gly Tyr Met Met Lys
 180 185 190
 Lys Gly His Arg Arg Lys Asn Trp Thr Glu Arg Trp Phe Val Leu Lys
 195 200 205
 Pro Asn Ile Ile Ser Tyr Tyr Val Ser Glu Asp Leu Lys Asp Lys Lys
 210 215 220
 Gly Asp Ile Leu Leu Asp Glu Asn Cys Cys Val Glu Ser Leu Pro Asp
 225 230 235 240
 Lys Asp Gly Lys Lys Cys Leu Phe Leu Val Lys Cys Phe Asp Lys Thr
 245 250 255
 Phe Glu Ile Ser Ala Ser Asp Lys Lys Gln Glu Trp Ile Gln Ala Ile
 260 265 270
 His Ser Thr Ile His Leu Leu Lys Leu Ser Pro Pro Pro Lys Glu Ala
 275 280 285
 Gln Leu Leu Lys Leu Arg Asn His Leu Ala Glu Gln Glu Leu Glu Arg
 290 295 300
 Gln Met Glu Leu Gln Ala Arg Gln
 305 310

<210> 99

<211> 1009

<212> DNA

<213> Homo Sapiens

<400> 99

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tgaagaacac	attcgggctt	tagaaaagga	ggaagaagaa	gaaaaacaga	agagtttgct	180
gagagaaagg	agacgacagc	gaaaaaatag	ggaatctttc	cagatatttt	tagatgaatt	240
acatgaacat	ggacaactgc	attctatgtc	atcttggtatg	gaattgtatc	caactattag	300
ttctgatatt	agattcacta	atatgcttgg	tcagcctgga	tcaactgcac	ttgatctttt	360
caagttttat	gttgaggatc	ttaaagcacg	ttatcatgac	gagaagaaga	taataaaaga	420
catttctaaag	gataaaggat	ttgtagtgtg	agtaaacact	acttttgaag	attttgtggc	480
gataatcagt	tcaactaaaa	gatcaactac	attagatgct	ggaaatatca	aattggcttt	540
caatagttta	ctagaaaagg	cagaagcccg	tgaacgtgaa	agagaaaaag	aagaggctcg	600
gaagatgaaa	cgaaaagaat	ctgcatttaa	gagtatgtta	aaacaagctg	ctcctccgat	660
agaattggat	gctgtctggg	aagatatccg	tgagagattt	gtaaaagagc	cagcatttga	720
ggacataact	ctagaatctg	aaagaaaacg	aatattttaa	gattttatgc	atgtgcttga	780
gcatgaatgt	cagcatcatc	attcaaagaa	caagaaacat	tctaagaaat	ctaaaaaaca	840
tcataggaaa	cgttcccgcg	ctcgatcggg	gtcagattca	ngatgatgat	gatagccatt	900
caaagaaaaa	aagacagcga	tgagaagtct	cggtctgntt	canaacattc	ttccantngc	960
agagtctgag	agaagtntaa	aaagtcaaaa	nagcatagan	aggaaagt		1009

<210> 100

<211> 292

<212> PRT

<213> Homo Sapiens

<400> 100

Ala Asn Val Thr Tyr Ser Thr Thr Trp Ser Glu Ala Gln Gln Tyr Leu
 1 5 10 15
 Met Asp Asn Pro Thr Phe Ala Glu Asp Glu Glu Leu Gln Asn Met Asp
 20 25 30
 Lys Glu Asp Ala Leu Ile Cys Phe Glu Glu His Ile Arg Ala Leu Glu
 35 40 45
 Lys Glu Glu Glu Glu Glu Lys Gln Lys Ser Leu Leu Arg Glu Arg Arg
 50 55 60
 Arg Gln Arg Lys Asn Arg Glu Ser Phe Gln Ile Phe Leu Asp Glu Leu
 65 70 75 80
 His Glu His Gly Gln Leu His Ser Met Ser Ser Trp Met Glu Leu Tyr
 85 90 95
 Pro Thr Ile Ser Ser Asp Ile Arg Phe Thr Asn Met Leu Gly Gln Pro
 100 105 110
 Gly Ser Thr Ala Leu Asp Leu Phe Lys Phe Tyr Val Glu Asp Leu Lys
 115 120 125
 Ala Arg Tyr His Asp Glu Lys Lys Ile Ile Lys Asp Ile Leu Lys Asp
 130 135 140
 Lys Gly Phe Val Val Glu Val Asn Thr Thr Phe Glu Asp Phe Val Ala
 145 150 155 160
 Ile Ile Ser Ser Thr Lys Arg Ser Thr Thr Leu Asp Ala Gly Asn Ile
 165 170 175
 Lys Leu Ala Phe Asn Ser Leu Leu Glu Lys Ala Glu Ala Arg Glu Arg
 180 185 190
 Glu Arg Glu Lys Glu Glu Ala Arg Lys Met Lys Arg Lys Glu Ser Ala
 195 200 205
 Phe Lys Ser Met Leu Lys Gln Ala Ala Pro Pro Ile Glu Leu Asp Ala
 210 215 220
 Val Trp Glu Asp Ile Arg Glu Arg Phe Val Lys Glu Pro Ala Phe Glu
 225 230 235 240
 Asp Ile Thr Leu Glu Ser Glu Arg Lys Arg Ile Phe Lys Asp Phe Met
 245 250 255
 His Val Leu Glu His Glu Cys Gln His His His Ser Lys Asn Lys Lys
 260 265 270
 His Ser Lys Lys Ser Lys Lys His His Arg Lys Arg Ser Arg Ser Arg
 275 280 285
 Ser Gly Ser Asp
 290

<210> 101

<211> 983

<212> DNA

<213> Homo Sapiens

<400> 101

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 ttttattttca gtattaaaat agcaatttta tttattactt ttttatatat agaatttgac 180
 accaaatttt ggaacttaaa aagaagattc ttaaaactta caatccagat tacgatgagg 240
 acctggtgca ggaagcttca tctgaagatg tcctgggcgt tcatatggtg gacaaagaca 300
 cagagagaga cattgagatg aaacggcaac tacggcgact acgggagctc cacctataca 360

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gcacatggaa gaagtaccaa gaggcgatga agacatcctt gggagttcca caacgtgagc 420
gtgacgaagg ctccttgggc aagccattgt gtccaccga gatactctcg gagacgttgc 480
caggctctgt gaagaaaagg gtatgctttc catcagaaga tcatctagag gagtttatag 540
cagaacatct ccctgaagca tccaatcaga gtctcctcac tgttgcccat gcagacgcag 600
gcacccaaac caacggtgac ctggaagacc tggaggagca tgggccaggg cagacagtct 660
ctgaggaagc cacagaagtt cacatgatgg aggggggaccc agacacactg gccgaacttc 720
tgatcaggga tgtacttcag gagctgtcca gttacaacgg cgaggaggag gaccanagg 780
aggtgaagac atccttggga gttccacaac gtggtgacct ggaagacctg gaggagcatg 840
tgncagggca gnnnttctct gaggaagcca caggggttca catgatgcag gtggaccag 900
ccacgctggc aaagagtgc ctggaagacc tggaggagca tgtgccagag cagacagtct 960
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<210> 102

<211> 230

<212> PRT

<213> Homo Sapiens

<400> 102

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Met Val Asp Lys Asp Thr Glu Arg Asp Ile Glu Met Lys Arg Gln Leu
1          5          10          15
Arg Arg Leu Arg Glu Leu His Leu Tyr Ser Thr Trp Lys Lys Tyr Gln
20          25          30
Glu Ala Met Lys Thr Ser Leu Gly Val Pro Gln Arg Glu Arg Asp Glu
35          40          45
Gly Ser Leu Gly Lys Pro Leu Cys Pro Pro Glu Ile Leu Ser Glu Thr
50          55          60
Leu Pro Gly Ser Val Lys Lys Arg Val Cys Phe Pro Ser Glu Asp His
65          70          75          80
Leu Glu Glu Phe Ile Ala Glu His Leu Pro Glu Ala Ser Asn Gln Ser
85          90          95
Leu Leu Thr Val Ala His Ala Asp Ala Gly Thr Gln Thr Asn Gly Asp
100         105         110
Leu Glu Asp Leu Glu Glu His Gly Pro Gly Gln Thr Val Ser Glu Glu
115         120         125
Ala Thr Glu Val His Met Met Glu Gly Asp Pro Asp Thr Leu Ala Glu
130         135         140
Leu Leu Ile Arg Asp Val Leu Gln Glu Leu Ser Ser Tyr Asn Gly Glu
145         150         155         160
Glu Glu Asp Pro Glu Val Lys Thr Ser Leu Gly Val Pro Gln Arg Gly
165         170         175
Asp Leu Glu Asp Leu Glu Glu His Val Gly Gln Phe Ser Glu Glu Ala
180         185         190
Thr Gly Val His Met Met Gln Val Asp Pro Ala Thr Leu Ala Lys Ser
195         200         205
Asp Leu Glu Asp Leu Glu Glu His Val Pro Glu Gln Thr Val Ser Glu
210         215         220
Glu Ala Thr Gly Val His
225         230

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<210> 103

<211> 843

<212> DNA

<213> Homo Sapiens

<400> 103

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cacgcccttt ctaccaagat gatagacagg atcttctcag gagcagtcac acgaggcaga      180
aaagtgcaga aggaagggaa gatcagctat gccgactttg tctggttttt gatctctgag      240
gaagacaaaa aaacaccgac cagcatcgag tactggttcc gctgcatgga cctggacggg      300
gacggcgccc tgtccatgtt cgagctcgag tacttctacg aggagcagtg ccgaaggctg      360
gacagcatgg ccatecgagg cctgcccttc caggactgcc tctgccagat gctggacctg      420
gtcaagccga ggactgaagg gaagatcacg ctgcaggacc tgaagcgctg caagctggcc      480
aacgtcttct tcgacacctt cttcaacatc gagaagtncc tcgaccacga gcagaaagag      540
cagatctccc tgctcaggga cggtgacagc ggcggggccc agctctcgga ctgggagaag      600
tnccggccga agagtncgac atcctgggtg ccgangaaac cgtggggana nccctgggga      660
agacgggttc naaggcgaac tcacccccnt ggancanaaa ctgantgcgc tgcgctcccc      720
gctggggcan aggccttctt ccaagcgctt cccgctgggg cgccgtggaa ctgttncaaa      780
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gnt

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<210> 104

<211> 197

<212> PRT

<213> Homo Sapiens

<400> 104

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Arg Cys Arg Ser Thr Leu Val Asp Pro Lys Asn Ser Ala Arg Gly Lys
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Phe Trp Glu Leu Asp Thr Asp His Asp Leu Leu Ile Asp Ala Asp Asp
          20              25              30
Leu Ala Arg His Asn Asp His Ala Leu Ser Thr Lys Met Ile Asp Arg
          35              40              45
Ile Phe Ser Gly Ala Val Thr Arg Gly Arg Lys Val Gln Lys Glu Gly
          50              55              60
Lys Ile Ser Tyr Ala Asp Phe Val Trp Phe Leu Ile Ser Glu Glu Asp
65              70              75              80
Lys Lys Thr Pro Thr Ser Ile Glu Tyr Trp Phe Arg Cys Met Asp Leu
          85              90              95
Asp Gly Asp Gly Ala Leu Ser Met Phe Glu Leu Glu Tyr Phe Tyr Glu
          100              105              110
Glu Gln Cys Arg Arg Leu Asp Ser Met Ala Ile Glu Ala Leu Pro Phe
          115              120              125
Gln Asp Cys Leu Cys Gln Met Leu Asp Leu Val Lys Pro Arg Thr Glu
          130              135              140
Gly Lys Ile Thr Leu Gln Asp Leu Lys Arg Cys Lys Leu Ala Asn Val
145              150              155              160
Phe Phe Asp Thr Phe Phe Asn Ile Glu Lys Leu Asp His Glu Gln Lys
          165              170              175
Glu Gln Ile Ser Leu Leu Arg Asp Gly Asp Ser Gly Gly Pro Glu Leu
          180              185              190
Ser Asp Trp Glu Lys
          195

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<210> 105

<211> 2264

<212> DNA

<213> Homo Sapiens

<400> 105

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cgacaacagg gctctattat gaccccaact cgcaatacta ctataattcc ttgaccagc 180
agtaccttta ctgggatggg gaaaaagaga cctacgtgcc agctgcagag tctagctccc 240
accagcagtc gggcctgcct cctgcaaaaag aggggaaaga gaagaaggag aaacccaaga 300
gcaaaacagc ccagcagatt gccaaagaca tggaaacgtg ggctaagagt ttgaataagc 360
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gagaatctgc tgcagcagac gctggctttg ctctctttga gaagaaggga gccttagctg 480
aaaggcagca gctcatccca gaattggtgc gaaatggaga tgaggagaat cccctcaaaa 540
ggggtctggt tgctgcttac agtgggtgaca gtgacaatga ggaggagctg gtggagagac 600
ttgagagtga ggaagagaag ctactgtact ggaagaagat ggcctgtctg ctctgccggc 660
gccagttccc gaacaaagat gccctagtca ggcaccagca actctcagac cttcacaagc 720
aaaacatgga catctaccga cgatccaggc tgagcgagca ggagctggaa gccttggagc 780
taaggagagag agagatgaaa taccgagacc gagctgcaga aagacgggag aagtacggca 840
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agcaaccac caaagatggc attgaccaca gtaacatttg caacaagatg ctgcaggcca 960
tggtctggcg ggaaggctct ggcttgggac gaaagtgtca aggcattacg gctcccattg 1020
aggctcaagt tgggctaaaag ggagctggcc taggagccaa aggcagcgca tatggtttgt 1080
cgggcgcaga ttctacaaa gatgtgtcc ggaaagccat gtttgcccg ttcactgaga 1140
tggagtgcga gagagagaga gagagagatg acaaggagca caagaagtgg tccatctccc 1200
gaattcgctg ttaccgcctg tctctttaag ggcactgcct gtgctgttaa tagatcttag 1260
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ggttgctgg tgaatggcct tcttcccg cagagggctt gtgaacagac cggagaggac 1380
agtggattgt ttatactcca gtgtacatag tgtaatgtag cgtgtttaca tgtgtagcct 1440
atgttggtgt ccatcagccc ctcacattcc taggggtttg agatgctgta ggtggtatgt 1500
gacaccaaag ccacctctgt catttggtgt gatgtctttt cttggcaaaa gccttgtgta 1560
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ctggctcctt tacaaaagaa ataccttgag aaaaaaann aannaaaaaa aannccnann 1680
nnntttttaa aangggncgg gggccaannn tttccnncc gggngggna nnaagtaaan 1740
ngtcccaaat nccccaaaa nggagcccn ttaaaattaa angggccgcn nttttaaaan 1800
nttcngaantn gggnaaaccc tnggggtttn ccaaatttaa cccctttgaa aaaaaanccc 1860
ctttcncaaa anngggntaa tanccaaaaa gggcccccan ccatttttgc cctttccaaa 1920
aaaatttgn caanncnnaa atgggnnaan ggggaatcca atttttttaa gggnnaaaaan 1980
gggttttaac nnacgggntt ccaaanttgn ttgggggaat ttttaaattc ccaannnccc 2040
aagggggnca atttagnggn cccnnaatcc cccaaaaant ggttcnnggn tnaaancngc 2100
cnnnnccnaa tttntanggg tttacttngn tttaaaaaac ccncccaaaa actccccenn 2160
gaaccnaaaa aanaaaagga ngccattttt ngngnnaaac ttttttaann nncnnttaa 2220
angggttaaa aaannnnnnn tnnnccnnaa tttttcaaan aang 2264

<210> 106

<211> 381

<212> PRT

<213> Homo Sapiens

<400> 106

Ser Thr Ser Thr Gln Ala Pro Ala Ala Ser Pro Thr Gly Val Val Pro
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Gly Thr Lys Tyr Ala Val Pro Asp Thr Ser Thr Tyr Gln Tyr Asp Glu
20 25 30
Ser Ser Gly Tyr Tyr Tyr Asp Pro Thr Thr Gly Leu Tyr Tyr Asp Pro
35 40 45
Asn Ser Gln Tyr Tyr Tyr Asn Ser Leu Thr Gln Gln Tyr Leu Tyr Trp
50 55 60
Asp Gly Glu Lys Glu Thr Tyr Val Pro Ala Ala Glu Ser Ser Ser His
65 70 75 80

Gln Gln Ser Gly Leu Pro Pro Ala Lys Glu Gly Lys Glu Lys Lys Glu
 85 90 95
 Lys Pro Lys Ser Lys Thr Ala Gln Gln Ile Ala Lys Asp Met Glu Arg
 100 105 110
 Trp Ala Lys Ser Leu Asn Lys Gln Lys Glu Asn Phe Lys Asn Ser Phe
 115 120 125
 Gln Pro Val Asn Ser Leu Arg Glu Glu Glu Arg Arg Glu Ser Ala Ala
 130 135 140
 Ala Asp Ala Gly Phe Ala Leu Phe Glu Lys Lys Gly Ala Leu Ala Glu
 145 150 155 160
 Arg Gln Gln Leu Ile Pro Glu Leu Val Arg Asn Gly Asp Glu Glu Asn
 165 170 175
 Pro Leu Lys Arg Gly Leu Val Ala Ala Tyr Ser Gly Asp Ser Asp Asn
 180 185 190
 Glu Glu Glu Leu Val Glu Arg Leu Glu Ser Glu Glu Glu Lys Leu Ala
 195 200 205
 Asp Trp Lys Lys Met Ala Cys Leu Leu Cys Arg Arg Gln Phe Pro Asn
 210 215 220
 Lys Asp Ala Leu Val Arg His Gln Gln Leu Ser Asp Leu His Lys Gln
 225 230 235 240
 Asn Met Asp Ile Tyr Arg Arg Ser Arg Leu Ser Glu Gln Glu Leu Glu
 245 250 255
 Ala Leu Glu Leu Arg Glu Arg Glu Met Lys Tyr Arg Asp Arg Ala Ala
 260 265 270
 Glu Arg Arg Glu Lys Tyr Gly Ile Pro Glu Pro Pro Glu Pro Lys Arg
 275 280 285
 Lys Lys Gln Phe Asp Ala Gly Thr Val Asn Tyr Glu Gln Pro Thr Lys
 290 295 300
 Asp Gly Ile Asp His Ser Asn Ile Gly Asn Lys Met Leu Gln Ala Met
 305 310 315 320
 Gly Trp Arg Glu Gly Ser Gly Leu Gly Arg Lys Cys Gln Gly Ile Thr
 325 330 335
 Ala Pro Ile Glu Ala Gln Val Arg Leu Lys Gly Ala Gly Leu Gly Ala
 340 345 350
 Lys Gly Ser Ala Tyr Gly Leu Ser Gly Ala Asp Ser Tyr Lys Asp Ala
 355 360 365
 Val Arg Lys Ala Met Phe Ala Arg Phe Thr Glu Met Glu
 370 375 380

<210> 107

<211> 1367

<212> DNA

<213> Homo Sapiens

<400> 107

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tcgaatgcat	attcttcagc	gagttccacc	ccacgctggg	acccaagatc	acctatcagg	180
tccctgaaga	cttcattctc	cgagagctgt	ttgacacagt	ccaagtgtac	atcatcacca	240
agccagagct	gcagaacaag	cttatcactg	tcacagctat	ggaaaagaag	ctgatcggct	300
gtcctgtgtg	catcgaacac	aagaagtaca	gccgcaatgc	tctcctcttc	aacctgggct	360
tcgtgtgtga	tgcccaggcc	aagacctgcy	ccctcgagcc	cattgttaaa	aagctgggctg	420
gctatctgac	cacactagag	ctagagagca	gcttcgtgtc	catggaggag	agcaagcaga	480
agttggtgcc	catcatgacc	atcttgctgg	aggagctaaa	tgccctcaggc	cggtgcactc	540
tgcccattga	tgagtccaac	accatccact	tgaaggtgat	tgagcagcgg	ccagaccctc	600

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cgggtggccca ggagtatgat gtacctgtct ttaccaaaga caaggaggat ttcttcaact      660
cacagtggga cctcactaca caacaaatcc tgccctacat tgatgggttc cgccacatcc      720
agaagatttc agcagaggca gatgtggagc tcaacctggt gcgcattgct atccagaacc      780
tgctgtacta cggcggttggt acactgggtg ccatcctcca gtactccaat gtatactgcc      840
caacgcccga ggtccaggac ctggtagatg acaagtccct gcaagaggca tgtctatcct      900
acgtgaccaa gcaagggcac aagagggcca gtctccggga tgtgttccag ctatactgca      960
gcctgagccc tggcactacc gtgcgagacc tcattggcgc ccacccccag cagctgcagc     1020
atgttgatga acggaagctg atccagttcg ggcttatgaa gaacctcatc aggcgactac     1080
agaagtatcc tgtgcgggtg actcggaag agcagagcca ccctgcccgg ctttatacag     1140
gctgccacag ctatgacgag atctgctgca agacaggcat gagctaccat gagctggatg     1200
agcggcttga aaatgacccc aacatcatca tctgctggaa gtgaggctgg tagtgactgg     1260
atggacacat tgctgtgggt agtccctcct actaggaggc ttgtcatact gtctagaggt     1320
tgactcttag ttctgtaaat aaagacatcc atttcaaaca gccaaaaa                     1367

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<210> 108

<211> 413

<212> PRT

<213> Homo Sapiens

<400> 108

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      20      25      30
Ala Met Gly Ser Gly Cys Arg Ile Glu Cys Ile Phe Phe Ser Glu Phe
      35      40      45
His Pro Thr Leu Gly Pro Lys Ile Thr Tyr Gln Val Pro Glu Asp Phe
      50      55      60
Ile Ser Arg Glu Leu Phe Asp Thr Val Gln Val Tyr Ile Ile Thr Lys
      65      70      75      80
Pro Glu Leu Gln Asn Lys Leu Ile Thr Val Thr Ala Met Glu Lys Lys
      85      90      95
Leu Ile Gly Cys Pro Val Cys Ile Glu His Lys Lys Tyr Ser Arg Asn
      100      105      110
Ala Leu Leu Phe Asn Leu Gly Phe Val Cys Asp Ala Gln Ala Lys Thr
      115      120      125
Cys Ala Leu Glu Pro Ile Val Lys Lys Leu Ala Gly Tyr Leu Thr Thr
      130      135      140
Leu Glu Leu Glu Ser Ser Phe Val Ser Met Glu Glu Ser Lys Gln Lys
      145      150      155      160
Leu Val Pro Ile Met Thr Ile Leu Leu Glu Glu Leu Asn Ala Ser Gly
      165      170      175
Arg Cys Thr Leu Pro Ile Asp Glu Ser Asn Thr Ile His Leu Lys Val
      180      185      190
Ile Glu Gln Arg Pro Asp Pro Pro Val Ala Gln Glu Tyr Asp Val Pro
      195      200      205
Val Phe Thr Lys Asp Lys Glu Asp Phe Phe Asn Ser Gln Trp Asp Leu
      210      215      220
Thr Thr Gln Gln Ile Leu Pro Tyr Ile Asp Gly Phe Arg His Ile Gln
      225      230      235      240
Lys Ile Ser Ala Glu Ala Asp Val Glu Leu Asn Leu Val Arg Ile Ala
      245      250      255
Ile Gln Asn Leu Leu Tyr Tyr Gly Val Val Thr Leu Val Ser Ile Leu
      260      265      270
Gln Tyr Ser Asn Val Tyr Cys Pro Thr Pro Lys Val Gln Asp Leu Val

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275	280	285
Asp Asp Lys Ser Leu Gln Glu Ala Cys Leu Ser Tyr Val Thr Lys Gln		
290	295	300
Gly His Lys Arg Ala Ser Leu Arg Asp Val Phe Gln Leu Tyr Cys Ser		
305	310	315
Leu Ser Pro Gly Thr Thr Val Arg Asp Leu Ile Gly Arg His Pro Gln		
	325	330
Gln Leu Gln His Val Asp Glu Arg Lys Leu Ile Gln Phe Gly Leu Met		
	340	345
Lys Asn Leu Ile Arg Arg Leu Gln Lys Tyr Pro Val Arg Val Thr Arg		
	355	360
Glu Glu Gln Ser His Pro Ala Arg Leu Tyr Thr Gly Cys His Ser Tyr		
	370	375
Asp Glu Ile Cys Cys Lys Thr Gly Met Ser Tyr His Glu Leu Asp Glu		
385	390	395
Arg Leu Glu Asn Asp Pro Asn Ile Ile Ile Cys Trp Lys		
	405	410

<210> 109

<211> 2113

<212> DNA

<213> Homo Sapiens

<400> 109

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tcgatgatgc	cttacagtgc	tactccgaag	ctattaagct	ggatccccac	aaccacgtgc	180
tgtacagcaa	ccgttctgct	gcctatgcca	agaaaggaga	ctaccagaag	gcttatgagg	240
atggctgcaa	gactgtcgac	ctaaagcctg	actggggcaa	gggctattca	cgaaaagcag	300
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<210> 110

<211> 543

<212> PRT

<213> Homo Sapiens

<400> 110

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Thr Thr Leu Ser Val Leu Leu Gly Val Asp Leu Gly Ser Met Asp Glu
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 Cys Glu Glu Cys Ile Gln Leu Glu Pro Thr Phe Ile Lys Gly Tyr Thr
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 Arg Lys Ala Ala Ala Leu Glu Ala Met Lys Asp Tyr Thr Lys Ala Met
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<211> 2765

<212> DNA

<213> Homo Sapiens

<400> 111

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<212> PRT

<213> Homo Sapiens

<400> 112

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 His Gly Arg Gln Gly Ile Val Pro Gly Asn Arg Val Lys Leu Leu Ile
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 Lys Pro Gln Gly Val Tyr Asp Ile Pro Pro Thr Lys Gly Val Tyr Ala
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 Ile Pro Pro Ser Ala Cys Arg Asp Glu Ala Gly Leu Arg Glu Lys Asp
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 Tyr Asp Phe Pro Pro Pro Met Arg Gln Ala Gly Arg Pro Asp Leu Arg
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 Pro Glu Gly Val Tyr Asp Ile Pro Pro Thr Cys Thr Lys Pro Ala Gly
 260 265 270
 Lys Asp Leu His Val Lys Tyr Asn Cys Asp Ile Pro Gly Ala Ala Glu
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 Pro Val Ala Arg Arg His Gln Ser Leu Ser Pro Asn His Pro Pro Pro
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 <212> DNA
 <213> Homo Sapiens

<400> 113

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<211> 906

<212> PRT

<213> Homo Sapiens

<400> 114

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65					70					75				80	
Lys	Glu	Ser	Gln	Phe	Leu	Lys	Glu	Glu	Leu	Val	Ala	Ala	Val	Glu	Asp



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 565 570 575
 Lys Leu Leu Ser Asn Thr Val Met Pro Arg Phe Thr Glu Gln Val Glu
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 Asn Glu Phe Ile Asp Ala Ser Arg Leu Val Tyr Asp Gly Ile Arg Asp
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 Ile Arg Lys Ala Val Leu Met Ile Arg Thr Pro Glu Glu Leu Asp Asp
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 Ala Ser Phe Gln Glu Glu Lys Ser Lys Leu Asp Ala Glu Val Ser Lys
 690 695 700
 Trp Asp Asp Ser Gly Asn Asp Ile Ile Val Leu Ala Lys Gln Met Cys
 705 710 715 720
 Met Ile Met Met Glu Met Thr Asp Phe Thr Arg Gly Lys Gly Pro Leu
 725 730 735
 Lys Asn Thr Ser Asp Val Ile Ser Ala Ala Lys Lys Ile Ala Glu Ala
 740 745 750
 Gly Ser Arg Met Asp Lys Leu Gly Arg Thr Ile Ala Asp His Cys Pro
 755 760 765
 Asp Ser Ala Cys Lys Gln Asp Leu Leu Ala Tyr Leu Gln Arg Ile Ala
 770 775 780
 Leu Tyr Cys His Gln Leu Asn Ile Cys Ser Lys Val Lys Ala Glu Val
 785 790 795 800
 Gln Asn Leu Gly Gly Glu Leu Val Val Ser Gly Val Asp Ser Ala Met
 805 810 815
 Ser Leu Ile Gln Ala Ala Lys Asn Leu Met Asn Ala Val Val Gln Thr
 820 825 830
 Val Lys Ala Ser Tyr Val Ala Ser Thr Lys Tyr Gln Lys Ser Gln Gly
 835 840 845
 Met Ala Ser Leu Asn Leu Pro Ala Val Ser Trp Lys Met Lys Ala Pro
 850 855 860
 Glu Lys Lys Pro Leu Val Lys Arg Glu Lys Gln Asp Glu Thr Gln Thr
 865 870 875 880
 Lys Ile Lys Arg Ala Ser Gln Lys Lys His Val Asn Pro Val Gln Ala
 885 890 895
 Leu Ser Glu Phe Lys Ala Met Asp Ser Ile
 900 905

<210> 115

<211> 1701

<212> DNA

<213> Homo Sapiens

<400> 115

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cctgataaga atccccaat gcaggagaca aactttaaag aaataagttt tgcatatgaa      180
gtactatcaa atcctgagaa gcgtgagtta tatgacagat acggagagca aggtcttcgg      240
gaaggcagcg gcggaggtgg gtggcatgga ttgatatatt ctctcacctg tttttgtggg      300
ggattgttcg gcttcatggg caatcagagt agaagtcgaa atggcagaag aagaggagag      360
gacatgatgc atccactcaa agtatcttta gaagatctgt ataatggcaa gacaaccaa      420
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gctgtccaaa agtgtagtgc ttgtcgaggt cgaggtgtgc gcatcatgat cagacagctg      540
gctccagggg tgggtacaaca gatgcagctc gtgtgctctg attgtaatgg tgaaggagag      600
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aagattcttg aagtccacgt agacaaaggc atgaaacatg gacagagaat tacattcact      720
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agaatttcat agcctgtaaa a                                     1701

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<210> 116

<211> 415

<212> PRT

<213> Homo Sapiens

<400> 116

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 20              25              30
Lys Glu Tyr His Pro Asp Lys Asn Pro Gln Met Gln Glu Thr Asn Phe
 35              40              45
Lys Glu Ile Ser Phe Ala Tyr Glu Val Leu Ser Asn Pro Glu Lys Arg
 50              55              60
Glu Leu Tyr Asp Arg Tyr Gly Glu Gln Gly Leu Arg Glu Gly Ser Gly
 65              70              75              80
Gly Gly Gly Trp His Gly Leu Ile Phe Ser Leu Thr Val Phe Cys Gly
 85              90              95
Gly Leu Phe Gly Phe Met Gly Asn Gln Ser Arg Ser Arg Asn Gly Arg
100              105              110
Arg Arg Gly Glu Asp Met Met His Pro Leu Lys Val Ser Leu Glu Asp
115              120              125
Leu Tyr Asn Gly Lys Thr Thr Lys Leu Gln Leu Ser Lys Asn Val Leu
130              135              140
Cys Ser Ala Cys Ser Gly Gln Gly Gly Lys Ser Gly Ala Val Gln Lys

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145 150 155 160
 Cys Ser Ala Cys Arg Gly Arg Gly Val Arg Ile Met Ile Arg Gln Leu
 165 170 175
 Ala Pro Gly Met Val Gln Gln Met Gln Ser Val Cys Ser Asp Cys Asn
 180 185 190
 Gly Glu Gly Glu Val Ile Asn Glu Lys Asp Arg Cys Lys Lys Cys Glu
 195 200 205
 Gly Lys Lys Val Ile Lys Glu Val Lys Ile Leu Glu Val His Val Asp
 210 215 220
 Lys Gly Met Lys His Gly Gln Arg Ile Thr Phe Thr Gly Glu Ala Asp
 225 230 235 240
 Gln Ala Pro Glu Trp Asn Pro Glu Thr Leu Phe Phe Leu Leu Pro Gly
 245 250 255
 Glu Lys Asn Met Glu Val Phe Gln Arg Asp Gly Asn Asp Leu His Met
 260 265 270
 Thr Tyr Lys Ile Gly Leu Val Glu Ala Leu Cys Gly Phe Gln Phe Thr
 275 280 285
 Leu Ser His Leu Asp Gly Arg Gln Ile Val Val Lys Tyr Pro Pro Gly
 290 295 300
 Lys Val Ile Glu Pro Gly Cys Val Arg Val Val Arg Gly Glu Gly Met
 305 310 315 320
 Pro Gln Tyr Arg Asn Pro Phe Glu Lys Gly Gly Leu Tyr Ile Lys Phe
 325 330 335
 Asp Val Gln Phe Pro Glu Asn Asn Trp Ile Asn Pro Asp Lys Leu Ser
 340 345 350
 Glu Leu Glu Asp Leu Leu Pro Ser Arg Pro Glu Val Pro Asn Ile Ile
 355 360 365
 Gly Glu Thr Glu Glu Val Glu Leu Gln Glu Phe Asp Ser Thr Arg Gly
 370 375 380
 Ser Gly Gly Gly Gln Arg Arg Glu Ala Tyr Asn Asp Ser Ser Asp Glu
 385 390 395 400
 Glu Ser Ser Ser His His Gly Pro Gly Val Gln Cys Ala His Gln
 405 410 415

<210> 117

<211> 1821

<212> DNA

<213> Homo Sapiens

<400> 117

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 aatgaacaaa atgggttatca accacttgga gaagttgttt gtgacaaaacg atgcagcaac 240
 tattttaaga gaactagaag tacagcatcc tgctgcaaaa atgattgtaa tggcttctca 300
 tatgcaagag caagaagttg gagatggcac aaactttgtt ctgggtatttg ctggagctct 360
 cctggaatta gctgaagaac ttctgaggat tggcctgtca gtttcagagg tcatagaagg 420
 ttatgaaata gcctgcagaa aagctcatga gattcttctt aatttggtat gttgttctgc 480
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 acaatatggt aatgaagtat ttctggccaa gcttattgct caggcatgcg tatctatttt 600
 tcttgattcc ggccatttca atgttgataa catcagagtt tgtaaaattc tgggctctgg 660
 tatcagttcc tcttcagtat tgcattggcat ggtttttaag aaggaaaccg aagggtgatgt 720
 aacatctgtc aaagatgcaa aaatagcagt gtactcttgt ccttttgatg gcatgataac 780
 agaaactaag ggaacagtgt tgataaagac tgctgaagaa ttgatgaatt ttagtaaggg 840
 agaagaaaac ctcattggatg cacaagtcaa agctattgct gatactggtg caaatgtcgt 900

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agtaacaggt ggcaaagtgg cagacatggc tcttcattat gcaaataaat ataatatcat    960
gttagtgagg ctaaaactcaa aatgggatct ccgaagactt tgtaaaaactg ttggtgctac    1020
agctcttcct agattgacac ctctgtcct tgaagaaatg ggacactgtg acagtgttta    1080
cctctcagaa gttggagata ctgaggtggg ggtttttaag catgaaaagg aagatggcgc    1140
catttctacc atagtacttc gaggtctctac agacaatctg atggatgaca tagaaagggg    1200
agtagacgat ggtgttaata ctttcaaagt tcttacaagg gataaacgtc ttgtaccggg    1260
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tggacttgaa cagtatgcta ttaagaagtt tgctgaggca tttgaagcta ttccccgcgc    1380
actggcagaa aactctggag ttaaggccaa tgaagtaatc tctaaacttt atgcagtaca    1440
tcaagaagga aataaaaacg ttggattaga tattgaggct gaagtcctctg ctgtaaagga    1500
catgctggaa gctggtattc tagatactta cctgggaaaa tattgggcta tcaaactcgc    1560
tactaatgct gcagtcactg tacttagagt ggatcagatc atcatggcaa aaccagctgg    1620
tgggcccaag cctccaagtg ggaagaaaga ctgggatgat gaccaaagt attgaaattg    1680
gcttaatttt tactgtaggt gaaggctgta tttgtagtag tactcaagaa tcacctgatg    1740
ttttcttatt ctcttaaat taagagttat tttgtgtttg tattcttggc tggatgttat    1800
aataaacata ttgttactgt c                                     1821

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<210> 118

<211> 548

<212> PRT

<213> Homo Sapiens

<400> 118

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Glu Gly Ala Lys His Phe Ser Gly Leu Glu Glu Ala Val Tyr Arg Asn.
  20          25          30
Ile Gln Ala Cys Lys Glu Leu Ala Gln Thr Thr Arg Thr Ala Tyr Gly
  35          40          45
Pro Lys Gly Met Asn Lys Met Val Ile Asn His Leu Glu Lys Leu Phe
  50          55          60
Val Thr Asn Asp Ala Ala Thr Ile Leu Arg Glu Leu Glu Val Gln His
  65          70          75          80
Pro Ala Ala Lys Met Ile Val Met Ala Ser His Met Gln Glu Gln Glu
  85          90          95
Val Gly Asp Gly Thr Asn Phe Val Leu Val Phe Ala Gly Ala Leu Leu
  100         105         110
Glu Leu Ala Glu Glu Leu Leu Arg Ile Gly Leu Ser Val Ser Glu Val
  115         120         125
Ile Glu Gly Tyr Glu Ile Ala Cys Arg Lys Ala His Glu Ile Leu Pro
  130         135         140
Asn Leu Val Cys Cys Ser Ala Lys Asn Leu Arg Asp Ile Asp Glu Val
  145         150         155         160
Ser Ser Leu Leu Arg Thr Ser Ile Met Ser Lys Gln Tyr Gly Asn Glu
  165         170         175
Val Phe Leu Ala Lys Leu Ile Ala Gln Ala Cys Val Ser Ile Phe Pro
  180         185         190
Asp Ser Gly His Phe Asn Val Asp Asn Ile Arg Val Cys Lys Ile Leu
  195         200         205
Gly Ser Gly Ile Ser Ser Ser Ser Val Leu His Gly Met Val Phe Lys
  210         215         220
Lys Glu Thr Glu Gly Asp Val Thr Ser Val Lys Asp Ala Lys Ile Ala
  225         230         235         240
Val Tyr Ser Cys Pro Phe Asp Gly Met Ile Thr Glu Thr Lys Gly Thr
  245         250         255

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Val Leu Ile Lys Thr Ala Glu Glu Leu Met Asn Phe Ser Lys Gly Glu
 260 265 270
 Glu Asn Leu Met Asp Ala Gln Val Lys Ala Ile Ala Asp Thr Gly Ala
 275 280 285
 Asn Val Val Val Thr Gly Gly Lys Val Ala Asp Met Ala Leu His Tyr
 290 295 300
 Ala Asn Lys Tyr Asn Ile Met Leu Val Arg Leu Asn Ser Lys Trp Asp
 305 310 315 320
 Leu Arg Arg Leu Cys Lys Thr Val Gly Ala Thr Ala Leu Pro Arg Leu
 325 330 335
 Thr Pro Pro Val Leu Glu Glu Met Gly His Cys Asp Ser Val Tyr Leu
 340 345 350
 Ser Glu Val Gly Asp Thr Gln Val Val Val Phe Lys His Glu Lys Glu
 355 360 365
 Asp Gly Ala Ile Ser Thr Ile Val Leu Arg Gly Ser Thr Asp Asn Leu
 370 375 380
 Met Asp Asp Ile Glu Arg Val Val Asp Asp Gly Val Asn Thr Phe Lys
 385 390 395 400
 Val Leu Thr Arg Asp Lys Arg Leu Val Pro Gly Gly Gly Ala Thr Glu
 405 410 415
 Ile Glu Leu Ala Lys Gln Ile Thr Ser Tyr Gly Glu Thr Cys Pro Gly
 420 425 430
 Leu Glu Gln Tyr Ala Ile Lys Lys Phe Ala Glu Ala Phe Glu Ala Ile
 435 440 445
 Pro Arg Ala Leu Ala Glu Asn Ser Gly Val Lys Ala Asn Glu Val Ile
 450 455 460
 Ser Lys Leu Tyr Ala Val His Gln Glu Gly Asn Lys Asn Val Gly Leu
 465 470 475 480
 Asp Ile Glu Ala Glu Val Pro Ala Val Lys Asp Met Leu Glu Ala Gly
 485 490 495
 Ile Leu Asp Thr Tyr Leu Gly Lys Tyr Trp Ala Ile Lys Leu Ala Thr
 500 505 510
 Asn Ala Ala Val Thr Val Leu Arg Val Asp Gln Ile Ile Met Ala Lys
 515 520 525
 Pro Ala Gly Gly Pro Lys Pro Pro Ser Gly Lys Lys Asp Trp Asp Asp
 530 535 540
 Asp Gln Asn Asp
 545

<210> 119

<211> 1321

<212> DNA

<213> Homo Sapiens

<400> 119

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tccaggagaa ggtgttcaag ggcttgacc tccttgagaa ggctgccgaa atgttatcgc      180
agctcgactt gttcagccga aatgaagatt tggaagagat tgcttcacc gacctgaagt      240
accttttggg gccagcgttt caaggagccc tcacatgaa acaagtcaac cccagcaagc      300
gtctagatca tttgcagcgg gctcgagaac actttataaa ctacttaact cagtgccatt      360
gctatcatgt ggcagagttt gagctgcccc aaacctatgaa caactctgct gaaaatcaca      420
ctgccaatc ctccatggct taccctagtc tcgttgctat ggcattctcaa agacaggcta      480
aaatacagag atacaagcag aagaaggagt tggagcatag gttgtctgca atgaaatctg      540
ctgtggaaag tggtaagca gatgatgagc gtgttcgtga atattatctt cttcaccttc      600
  
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agaggtggat tgatatcagc ttagaagaga ttgagagcat tgaccaggaa ataaagatcc 660
tgagagaaag agactcttca agagaggcat caacttctaa ctcatctcgc caggagaggc 720
ctccagtga acccttcatt ctcaactcga acatggctca agccaaagta tttggagctg 780
ggtatccaag tctgccaaat atgacgggtga gtgactggta tgagcaacat cggaatatg 840
gagcattacc ggatcaggga atagccaagg cagcaccaga ggaattcaga aaagcagctc 900
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accatgcagt cctcccctcc ctggtctcct gcttcagctc tgtacaacga gggcaaagat 1140
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gatgatatga accagcagtc ttgttttggc atcatcctca tcatgttgta ttccagcttc 1260
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c 1321

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<210> 120

<211> 339

<212> PRT

<213> Homo Sapiens

<400> 120

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          20          25          30
Ala Gly Ser Arg Ile Val Gln Glu Lys Val Phe Lys Gly Leu Asp Leu
          35          40          45
Leu Glu Lys Ala Ala Glu Met Leu Ser Gln Leu Asp Leu Phe Ser Arg
          50          55          60
Asn Glu Asp Leu Glu Glu Ile Ala Ser Thr Asp Leu Lys Tyr Leu Leu
65          70          75          80
Val Pro Ala Phe Gln Gly Ala Leu Thr Met Lys Gln Val Asn Pro Ser
          85          90          95
Lys Arg Leu Asp His Leu Gln Arg Ala Arg Glu His Phe Ile Asn Tyr
          100          105          110
Leu Thr Gln Cys His Cys Tyr His Val Ala Glu Phe Glu Leu Pro Lys
          115          120          125
Thr Met Asn Asn Ser Ala Glu Asn His Thr Ala Asn Ser Ser Met Ala
          130          135          140
Tyr Pro Ser Leu Val Ala Met Ala Ser Gln Arg Gln Ala Lys Ile Gln
145          150          155          160
Arg Tyr Lys Gln Lys Lys Glu Leu Glu His Arg Leu Ser Ala Met Lys
          165          170          175
Ser Ala Val Glu Ser Gly Gln Ala Asp Asp Glu Arg Val Arg Glu Tyr
          180          185          190
Tyr Leu Leu His Leu Gln Arg Trp Ile Asp Ile Ser Leu Glu Glu Ile
          195          200          205
Glu Ser Ile Asp Gln Glu Ile Lys Ile Leu Arg Glu Arg Asp Ser Ser
          210          215          220
Arg Glu Ala Ser Thr Ser Asn Ser Ser Arg Gln Glu Arg Pro Pro Val
225          230          235          240
Lys Pro Phe Ile Leu Thr Arg Asn Met Ala Gln Ala Lys Val Phe Gly
          245          250          255
Ala Gly Tyr Pro Ser Leu Pro Thr Met Thr Val Ser Asp Trp Tyr Glu
          260          265          270
Gln His Arg Lys Tyr Gly Ala Leu Pro Asp Gln Gly Ile Ala Lys Ala

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275	280	285
Ala Pro Glu Glu Phe Arg Lys	Ala Ala Gln Gln	Gln Glu Glu Gln Glu
290	295	300
Glu Lys Glu Glu Glu Asp Asp	Glu Gln Thr Leu	His Arg Ala Arg Glu
305	310	315
Trp Asp Asp Trp Lys Asp Thr	His Pro Arg Gly	Tyr Gly Asn Arg Gln
325	330	335
Asn Met Gly		

<210> 121

<211> 2965

<212> DNA

<213> Homo Sapiens

<400> 121

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tgagcccgcg	ggagcccagg	acgccgcttc	cccgcccatc	cccgcctccc	gaggccggcc	180
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tagcagaatt	ggaaaaaatt	aatgcagaat	ttttacgtgc	acaacagcag	cttgaacaag	300
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agaggcaaaa	tgcagtatta	caagctgcac	aagatgattt	gggacacctt	cgaaccagc	420
tgtgggaagc	tcaagcagag	atggagaata	ttaaggcgat	tgccacagtc	tctgagaaca	480
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gaagaaggct	gtctgaaggt	caagaggagg	aaaatttaga	aaatgaaatg	aaaaaggccc	720
aagaggatgc	tgagaaactt	cggtccgttg	tgatgccaat	ggaaaaggaa	attgcagctt	780
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aagaactgaa	tcattatctg	gaagctgaga	aatcttgtag	gactgatcta	gagatgtatg	900
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gggagttggt	attaaaatac	cgtgaggaca	tcattaatgt	gcggacagca	gcagaccacg	2280
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caaaaggaag actggagaaa tgcttacttc tagagggaga agactgtgcg gcacaggaaa 2940
cagcaaacag tggggtgatc tgcag 2965

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<210> 122

<211> 862

<212> PRT

<213> Homo Sapiens

<400> 122

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Met Ala Gln Pro Gly Pro Ala Ser Gln Pro Asp Val Ser Leu Gln Gln
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20 25 30
Gln Gln Leu Glu Gln Glu Phe Asn Gln Lys Arg Ala Lys Phe Lys Glu
35 40 45
Leu Tyr Leu Ala Lys Glu Glu Asp Leu Lys Arg Gln Asn Ala Val Leu
50 55 60
Gln Ala Ala Gln Asp Asp Leu Gly His Leu Arg Thr Gln Leu Trp Glu
65 70 75 80
Ala Gln Ala Glu Met Glu Asn Ile Lys Ala Ile Ala Thr Val Ser Glu
85 90 95
Asn Thr Lys Gln Glu Ala Ile Asp Glu Val Lys Arg Gln Trp Arg Glu
100 105 110
Glu Val Ala Ser Leu Gln Ala Val Met Lys Glu Thr Val Arg Asp Tyr
115 120 125
Glu His Gln Phe His Leu Arg Leu Glu Gln Glu Arg Thr Gln Trp Ala
130 135 140
Gln Tyr Arg Glu Tyr Ala Glu Arg Glu Ile Ala Asp Leu Arg Arg Arg
145 150 155 160
Leu Ser Glu Gly Gln Glu Glu Glu Asn Leu Glu Asn Glu Met Lys Lys
165 170 175
Ala Gln Glu Asp Ala Glu Lys Leu Arg Ser Val Val Met Pro Met Glu
180 185 190
Lys Glu Ile Ala Ala Leu Lys Asp Lys Leu Thr Glu Ala Glu Asp Lys
195 200 205
Ile Lys Glu Leu Glu Ala Ser Lys Val Lys Glu Leu Asn His Tyr Leu
210 215 220
Glu Ala Glu Lys Ser Cys Arg Thr Asp Leu Glu Met Tyr Val Ala Val
225 230 235 240
Leu Asn Thr Gln Lys Ser Val Leu Gln Glu Asp Ala Glu Lys Leu Arg
245 250 255
Lys Glu Leu His Glu Val Cys His Leu Leu Glu Gln Glu Arg Gln Gln
260 265 270
His Asn Gln Leu Lys His Thr Trp Gln Lys Ala Asn Asp Gln Phe Leu
275 280 285
Glu Ser Gln Arg Leu Leu Met Arg Asp Met Gln Arg Met Glu Ile Val

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290 295 300
 Leu Thr Ser Glu Gln Leu Arg Gln Val Glu Glu Leu Lys Lys Lys Asp
 305 310 315 320
 Gln Glu Asp Asp Glu Gln Gln Arg Leu Asn Lys Arg Lys Asp His Lys
 325 330 335
 Lys Ala Asp Val Glu Glu Glu Ile Lys Ile Pro Val Val Cys Ala Leu
 340 345 350
 Thr Gln Glu Glu Ser Ser Ala Gln Leu Ser Asn Glu Glu Glu His Leu
 355 360 365
 Asp Ser Thr Arg Gly Ser Val His Ser Leu Asp Ala Gly Leu Leu Leu
 370 375 380
 Pro Ser Gly Asp Pro Phe Ser Lys Ser Asp Asn Asp Met Phe Lys Asp
 385 390 395 400
 Gly Leu Arg Arg Ala Gln Ser Thr Asp Ser Leu Gly Thr Ser Gly Ser
 405 410 415
 Leu Gln Ser Lys Ala Leu Gly Tyr Asn Tyr Lys Ala Lys Ser Ala Gly
 420 425 430
 Asn Leu Asp Glu Ser Asp Phe Gly Pro Leu Val Gly Ala Asp Ser Val
 435 440 445
 Ser Glu Asn Phe Asp Thr Ala Ser Leu Gly Ser Leu Gln Met Pro Ser
 450 455 460
 Gly Phe Met Leu Thr Lys Asp Gln Glu Arg Ala Ile Lys Ala Met Thr
 465 470 475 480
 Pro Glu Gln Glu Glu Thr Ala Ser Leu Leu Ser Ser Val Thr Gln Gly
 485 490 495
 Met Glu Ser Ala Tyr Val Ser Pro Ser Gly Tyr Arg Leu Val Ser Glu
 500 505 510
 Thr Glu Trp Asn Leu Leu Gln Lys Glu Val His Asn Ala Gly Asn Lys
 515 520 525
 Leu Gly Arg Arg Cys Asp Met Cys Ser Asn Tyr Glu Lys Gln Leu Gln
 530 535 540
 Gly Ile Gln Ile Gln Glu Ala Glu Thr Arg Asp Gln Val Lys Lys Leu
 545 550 555 560
 Gln Leu Met Leu Arg Gln Ala Asn Asp Gln Leu Glu Lys Thr Met Lys
 565 570 575
 Asp Lys Gln Glu Leu Glu Asp Phe Ile Lys Gln Ser Ser Glu Asp Ser
 580 585 590
 Ser His Gln Ile Ser Ala Leu Val Leu Arg Ala Gln Ala Ser Glu Ile
 595 600 605
 Leu Leu Glu Glu Leu Gln Gln Gly Leu Ser Gln Ala Lys Arg Asp Val
 610 615 620
 Gln Glu Gln Met Ala Val Leu Met Gln Ser Arg Glu Gln Val Ser Glu
 625 630 635 640
 Glu Leu Val Arg Leu Gln Lys Asp Asn Asp Ser Leu Gln Gly Lys His
 645 650 655
 Ser Leu His Val Ser Leu Gln Gln Ala Glu Asp Phe Ile Leu Pro Asp
 660 665 670
 Thr Thr Glu Ala Leu Arg Glu Leu Val Leu Lys Tyr Arg Glu Asp Ile
 675 680 685
 Ile Asn Val Arg Thr Ala Ala Asp His Val Glu Glu Lys Leu Lys Ala
 690 695 700
 Glu Ile Leu Phe Leu Lys Glu Gln Ile Gln Ala Glu Gln Cys Leu Lys
 705 710 715 720
 Glu Asn Leu Glu Glu Thr Leu Gln Leu Glu Ile Glu Asn Cys Lys Glu
 725 730 735

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<210> 123
<211> 544
<212> DNA
<213> Homo Sapiens
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<210> 124
<211> 178
<212> PRT
<213> Homo Sapiens
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115 120 125
 Gln Glu Tyr Ile Lys Ile Val Ile Asn Lys Lys Gln Leu Leu Gly Lys
 130 135 140
 Thr Leu Glu Gln Gly Val Ala His Asn Val Lys Ala Met Val Leu Glu
 145 150 155 160
 Leu Lys Gln Ser Glu Glu Asp Ala Arg Lys Asn Phe Gln Leu Glu Glu
 165 170 175
 Glu Glu

<210> 125
 <211> 1302
 <212> DNA
 <213> Homo Sapiens

<400> 125
 atggaggtgg tggaccccgca gcagctgggc atgttcacgg agggcgagct gatgtcgggtg 60
 ggtatggaca cgttcatcca ccgcatcgac tccaccgagg tcatctacca gccgcgccgc 120
 aagcggggcca agctcatcgg caagtacctg atggggggacc tgctggggga aggtctttac 180
 ggcaaggtga aggaggtgct ggactcggag acgctgtgca ggagggccgt caagatcctc 240
 aagaagaaga agttgcgaag gatccccaac ggggaggcca acgtgaagaa ggaaattcaa 300
 ctactgagga gggtacggca caaaaatgtc atccagctgg tggatgtgtt atacaacgaa 360
 gagaagcaga aaatgtatat ggtgatggag tactgcgtgt gtggcatgca ggaaatgctg 420
 gacagcgtgc cggagaagcg tttcccagtg tgccaggccc acgggtactt ctgtcagctg 480
 attgacggcc tggagtacct gcatagccag ggcattgtgc acaaggacat caagccgggg 540
 aacctgctgc tcaccaccgg tggcaccctc aaaatctcgg acctgggcgt ggccgaggca 600
 ctgcaccctg tcgcggcgga cgacacctgc cggaccagcc agggctcccc ggctttccag 660
 ccgcccagga ttgccaacgg cctggacacc ttctccggt tcaaggtgga catctggtcg 720
 gctgggggtca cctctacaa catcaccacg ggtctgtacc ccttcgaagg ggacaacatc 780
 tacaagttgt ttgagaacat cgggaagggg agctacgcca tcccgggcga ctgtggcccc 840
 ccgctctctg acctgctgaa agggatgctt gagtacgaac cggccaagag gttctccatc 900
 cggcagatcc ggcagcacag ctggttccgg aagaaacatc ctccggctga agcaccagtg 960
 cccatcccac cgagcccaga caccaaggac cggtgggcga gcatgactgt ggtgccgtac 1020
 ttggaggacc tgcacggcgc ggacgaggac gaggacctct tcgacatcga ggatgacatc 1080
 atctacactc aggacttcac ggtgcccgga caggctccag aagaggaggc cagtcacaat 1140
 ggacagcgcc ggggcctccc caaggccgtg tgtatgaacg gcacagaggc ggcgagctg 1200
 agcaccaaat ccagggcgga gggccgggcc cccaacctg cccgcaaggc ctgctccgcc 1260
 agcagcaaga tccgcgggct gtcggcctgc aagcagcagt ga 1302

<210> 126
 <211> 433
 <212> PRT
 <213> Homo Sapiens

<400> 126
 Met Glu Val Val Asp Pro Gln Gln Leu Gly Met Phe Thr Glu Gly Glu
 1 5 10 15
 Leu Met Ser Val Gly Met Asp Thr Phe Ile His Arg Ile Asp Ser Thr
 20 25 30
 Glu Val Ile Tyr Gln Pro Arg Arg Lys Arg Ala Lys Leu Ile Gly Lys
 35 40 45
 Tyr Leu Met Gly Asp Leu Leu Gly Glu Gly Ser Tyr Gly Lys Val Lys
 50 55 60
 Glu Val Leu Asp Ser Glu Thr Leu Cys Arg Arg Ala Val Lys Ile Leu
 65 70 75 80

Lys Lys Lys Lys Leu Arg Arg Ile Pro Asn Gly Glu Ala Asn Val Lys
 85 90 95
 Lys Glu Ile Gln Leu Leu Arg Arg Leu Arg His Lys Asn Val Ile Gln
 100 105 110
 Leu Val Asp Val Leu Tyr Asn Glu Glu Lys Gln Lys Met Tyr Met Val
 115 120 125
 Met Glu Tyr Cys Val Cys Gly Met Gln Glu Met Leu Asp Ser Val Pro
 130 135 140
 Glu Lys Arg Phe Pro Val Cys Gln Ala His Gly Tyr Phe Cys Gln Leu
 145 150 155 160
 Ile Asp Gly Leu Glu Tyr Leu His Ser Gln Gly Ile Val His Lys Asp
 165 170 175
 Ile Lys Pro Gly Asn Leu Leu Leu Thr Thr Gly Gly Thr Leu Lys Ile
 180 185 190
 Ser Asp Leu Gly Val Ala Glu Ala Leu His Pro Phe Ala Ala Asp Asp
 195 200 205
 Thr Cys Arg Thr Ser Gln Gly Ser Pro Ala Phe Gln Pro Pro Glu Ile
 210 215 220
 Ala Asn Gly Leu Asp Thr Phe Ser Gly Phe Lys Val Asp Ile Trp Ser
 225 230 235 240
 Ala Gly Val Thr Leu Tyr Asn Ile Thr Thr Gly Leu Tyr Pro Phe Glu
 245 250 255
 Gly Asp Asn Ile Tyr Lys Leu Phe Glu Asn Ile Gly Lys Gly Ser Tyr
 260 265 270
 Ala Ile Pro Gly Asp Cys Gly Pro Pro Leu Ser Asp Leu Leu Lys Gly
 275 280 285
 Met Leu Glu Tyr Glu Pro Ala Lys Arg Phe Ser Ile Arg Gln Ile Arg
 290 295 300
 Gln His Ser Trp Phe Arg Lys Lys His Pro Pro Ala Glu Ala Pro Val
 305 310 315 320
 Pro Ile Pro Pro Ser Pro Asp Thr Lys Asp Arg Trp Arg Ser Met Thr
 325 330 335
 Val Val Pro Tyr Leu Glu Asp Leu His Gly Ala Asp Glu Asp Glu Asp
 340 345 350
 Leu Phe Asp Ile Glu Asp Asp Ile Ile Tyr Thr Gln Asp Phe Thr Val
 355 360 365
 Pro Gly Gln Val Pro Glu Glu Ala Ser His Asn Gly Gln Arg Arg
 370 375 380
 Gly Leu Pro Lys Ala Val Cys Met Asn Gly Thr Glu Ala Ala Gln Leu
 385 390 395 400
 Ser Thr Lys Ser Arg Ala Glu Gly Arg Ala Pro Asn Pro Ala Arg Lys
 405 410 415
 Ala Cys Ser Ala Ser Ser Lys Ile Arg Arg Leu Ser Ala Cys Lys Gln
 420 425 430
 Gln

<210> 127

<211> 1488

<212> DNA

<213> Homo Sapiens

<400> 127

gaggggagg gggg ggggtgccgg caagatggct ggcggcgaga agatgacgtt tcccagagaa 60
 ccaagccaca aaaagtacag ggccggcctg aagaaggaga aacgaaagaa acgtcggcag 120

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gaacttgctc gactgagaga ctcaggactc tcacagaagg aggaagagga ggacactttt 180
attgaagaac aacaactaga agaagagaag ctattggaaa gagagaggca aagattacat 240
gaggagtggg tgctaagaga gcagaaggca caagaagaat tcagaataaa gaaggaaaag 300
gaagaggcgg ctaaaaaacg gcaagaagaa caagagagaa agttaaagga acaatgggaa 360
gaacagcaga ggaaagagag agaagaggag gacagaaaac gacaggagaa gaaagaaaaa 420
gaggaagctt tgcagaagat gctggatcag gctgaaaatg agttggaaaa tgggtaccaca 480
tggaacaaacc cagaaccacc cgtggatttc agagtaatgg agaaggatcg agctaattgt 540
cccttctaca gtaaaacagg agcttgcaga tttggagata gatgttcacg taaacataat 600
ttcccaacat ccagtcctac ccttcttatt aagagcatgt ttacgacgtt tgggaatggag 660
cagtgcagga gggatgacta tgaccctgac gcaagcctgg agtacagcga ggaagaaacc 720
taccaacagt tcctagactt ctatgaggat gtgttgcccg agttcaagaa cgtggggaaa 780
gtgattcagt tcaagggtcag ctgcaatttg gaacctcacc tgaggggcaa tgtatatgtt 840
cagtaccagt cggaagaaga atgccaagca gccctttctc tgtttaacgg acgatggtat 900
gcaggacgac agctgcagtg tgaattctgc cccgtgaccc ggtggaaaat ggcgatttgt 960
ggtttatttg aaatacaaca atgtccaaga ggaaagcact gcaactttct tcatgtgttc 1020
agaaatccca acaatgaatt ctgggaagct aatagagaca tctacttgtc tccagatcgg 1080
actggctcct cctttgggaa gaactccgaa aggagggaga ggatgggcca ccacgacgac 1140
tactacagca ggctgcgggg aaggagaaac ctagtccag accactccta caaaagaaat 1200
ggggaatccg agaggaaaaag tagtcgtcac agggggaaga aatctcacia acgcacatca 1260
aagagtcggg agaggcaciaa ttcacgaagc agaggaagaa atagggaccg cagcagggac 1320
cgcagccggg gccggggcgag ccggagccgg agccggagcc ggagccgcag gagccgccgc 1380
agccggagcc aaagtccctc taggtccga agtcgtggca ggaggaggtc gggtaataga 1440
gacagaactg ttcagagtcc caaatccaaa taaactagtt ttgttctt 1488

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<210> 128

<211> 482

<212> PRT

<213> Homo Sapiens

<400> 128

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Met Ala Ala Pro Glu Lys Met Thr Phe Pro Glu Lys Pro Ser His Lys
 1          5          10          15
Lys Tyr Arg Ala Ala Leu Lys Lys Glu Lys Arg Lys Lys Arg Arg Gln
 20          25          30
Glu Leu Ala Arg Leu Arg Asp Ser Gly Leu Ser Gln Lys Glu Glu Glu
 35          40          45
Glu Asp Thr Phe Ile Glu Glu Gln Gln Leu Glu Glu Glu Lys Leu Leu
 50          55          60
Glu Arg Glu Arg Gln Arg Leu His Glu Glu Trp Leu Leu Arg Glu Gln
 65          70          75          80
Lys Ala Gln Glu Glu Phe Arg Ile Lys Lys Glu Lys Glu Glu Ala Ala
 85          90          95
Lys Lys Arg Gln Glu Glu Gln Glu Arg Lys Leu Lys Glu Gln Trp Glu
100          105          110
Glu Gln Gln Arg Lys Glu Arg Glu Glu Glu Glu Gln Lys Arg Gln Glu
115          120          125
Lys Lys Glu Lys Glu Glu Ala Leu Gln Lys Met Leu Asp Gln Ala Glu
130          135          140
Asn Glu Leu Glu Asn Gly Thr Thr Trp Gln Asn Pro Glu Pro Pro Val
145          150          155          160
Asp Phe Arg Val Met Glu Lys Asp Arg Ala Asn Cys Pro Phe Tyr Ser
165          170          175
Lys Thr Gly Ala Cys Arg Phe Gly Asp Arg Cys Ser Arg Lys His Asn
180          185          190
Phe Pro Thr Ser Ser Pro Thr Leu Leu Ile Lys Ser Met Phe Thr Thr

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195 200 205
 Phe Gly Met Glu Gln Cys Arg Arg Asp Asp Tyr Asp Pro Asp Ala Ser
 210 215 220
 Leu Glu Tyr Ser Glu Glu Glu Thr Tyr Gln Gln Phe Leu Asp Phe Tyr
 225 230 235 240
 Glu Asp Val Leu Pro Glu Phe Lys Asn Val Gly Lys Val Ile Gln Phe
 245 250 255
 Lys Val Ser Cys Asn Leu Glu Pro His Leu Arg Gly Asn Val Tyr Val
 260 265 270
 Gln Tyr Gln Ser Glu Glu Glu Cys Gln Ala Ala Leu Ser Leu Phe Asn
 275 280 285
 Gly Arg Trp Tyr Ala Gly Arg Gln Leu Gln Cys Glu Phe Cys Pro Val
 290 295 300
 Thr Arg Trp Lys Met Ala Ile Cys Gly Leu Phe Glu Ile Gln Gln Cys
 305 310 315 320
 Pro Arg Gly Lys His Cys Asn Phe Leu His Val Phe Arg Asn Pro Asn
 325 330 335
 Asn Glu Phe Trp Glu Ala Asn Arg Asp Ile Tyr Leu Ser Pro Asp Arg
 340 345 350
 Thr Gly Ser Ser Phe Gly Lys Asn Ser Glu Arg Arg Glu Arg Met Gly
 355 360 365
 His His Asp Asp Tyr Tyr Ser Arg Leu Arg Gly Arg Arg Asn Pro Ser
 370 375 380
 Pro Asp His Ser Tyr Lys Arg Asn Gly Glu Ser Glu Arg Lys Ser Ser
 385 390 395 400
 Arg His Arg Gly Lys Lys Ser His Lys Arg Thr Ser Lys Ser Arg Glu
 405 410 415
 Arg His Asn Ser Arg Ser Arg Gly Arg Asn Arg Asp Arg Ser Arg Asp
 420 425 430
 Arg Ser Arg Gly Arg Gly Ser Arg Ser Arg Ser Arg Ser Arg Ser Arg
 435 440 445
 Arg Ser Arg Arg Ser Arg Ser Gln Ser Ser Ser Arg Ser Arg Ser Arg
 450 455 460
 Gly Arg Arg Arg Ser Gly Asn Arg Asp Arg Thr Val Gln Ser Pro Lys
 465 470 475 480
 Ser Lys

<210> 129

<211> 1663

<212> DNA

<213> Homo Sapiens

<400> 129

aggccctgag ccaactccgg gtgctctgct gtgagtggct gaggcccgag atccacacca 60
 aggagcagat cctggagcta ctggtgctgg agcagttcct gaccatcctg ccccaggagc 120
 tccaggcctg ggtgcaggag cattgcccgg agagcgctga agaggetgtc actctctctg 180
 aagatctgga gcgggaactg gatgagccag gacaccaggt ctcaactcct ccaaacgaac 240
 agaaaccggt gtgggagaag atatcctcct caggaactgc aaaggaatcc ccgagcagca 300
 tgcagccaca gcccttgagg accagtcaca aatacagatc ttggggggccc ctgtacatcc 360
 aagagtctgg tgaggagcag gagttcgctc aagatccaag aaaggtccga gattgcagat 420
 tgagtaccca gcacgaggaa tcagcagatg agcagaaagg ttctgaagca gaggggctca 480
 aaggggatat aatttctgtg attatcgcca ataaacctga ggccagctta gagaggcagt 540
 gcgtaaacct tgaaaatgaa aaaggaacaa aacccccctc tcaagaggca ggctccaaga 600
 aaggtagaga atcagttcct actaaaccta ccccaggaga gagacgttat atatgtgctg 660

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aatgtggcaa agccttttagt aatagctcaa atctcaccaa acacaggaga acacacactg 720
gggagaaacc ttacgtgtgc accaagtgtg ggaaagcttt cagccacagc tcaaacctca 780
ccctccacta cagaacacac ttggtggacc ggccctatga ctgtaagtgt ggaaaagctt 840
ttgggcagag ctcagacctt cttaaaccatc agagaatgca cacagaagag gcgccatatac 900
agtgcaaaga ttgtggcaag gctttcagcg ggaaaggcag cctcattcgt cactatcgga 960
tccacactgg ggagaagcct tatcagtgtg acgaatgtgg gaagagcttc agtcagcatg 1020
cgggcctcag cteccaccag agactccaca ccggagagaa gccatataag tgtaaggagt 1080
gtgggaaagc cttcaaccac agctccaact tcaataaaca ccacagaatc cacaccgggg 1140
aaaagcccta ctggtgtcat cactgtggaa agaccttctg tagcaagtcc aatctttcca 1200
aacatcagcg agtccacact ggagagggag aagcaccgta actttcaagc gctcctgttg 1260
ttgtcgttgt tttaaacttt agaactctgaa aaccagaaag aagtcttctc attgcagcag 1320
catcgattcc ggtgatagag tttgtatcac tcaacatcag gggatgcctg aggagtgcga 1380
gtccacacag aacatggcag gcaggaggtc ctcagaaggt gtcaggaggt tccacactcg 1440
ccagttcact ggagcagagt cccttcgcca cacttagggg cccagtaagc catgccagca 1500
ttaccttttg cgtagttaaa cagacgtgta tccagtctag ttaaggaaga aacattaaga 1560
ttgtttaatt ttttaacatat attcaagaat ttttaattgt aaagaattga gccacattga 1620
acacaattga atgagattca gaataaactt ataacatctt aaa 1663

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<210> 130

<211> 412

<212> PRT

<213> Homo Sapiens

<400> 130

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Ala Leu Ser Gln Leu Arg Val Leu Cys Cys Glu Trp Leu Arg Pro Glu
 1          5          10          15
Ile His Thr Lys Glu Gln Ile Leu Glu Leu Leu Val Leu Glu Gln Phe
          20          25          30
Leu Thr Ile Leu Pro Gln Glu Leu Gln Ala Trp Val Gln Glu His Cys
          35          40          45
Pro Glu Ser Ala Glu Glu Ala Val Thr Leu Leu Glu Asp Leu Glu Arg
          50          55          60
Glu Leu Asp Glu Pro Gly His Gln Val Ser Thr Pro Pro Asn Glu Gln
65          70          75          80
Lys Pro Val Trp Glu Lys Ile Ser Ser Ser Gly Thr Ala Lys Glu Ser
          85          90          95
Pro Ser Ser Met Gln Pro Gln Pro Leu Glu Thr Ser His Lys Tyr Glu
          100          105          110
Ser Trp Gly Pro Leu Tyr Ile Gln Glu Ser Gly Glu Glu Gln Glu Phe
          115          120          125
Ala Gln Asp Pro Arg Lys Val Arg Asp Cys Arg Leu Ser Thr Gln His
          130          135          140
Glu Glu Ser Ala Asp Glu Gln Lys Gly Ser Glu Ala Glu Gly Leu Lys
145          150          155          160
Gly Asp Ile Ile Ser Val Ile Ile Ala Asn Lys Pro Glu Ala Ser Leu
          165          170          175
Glu Arg Gln Cys Val Asn Leu Glu Asn Glu Lys Gly Thr Lys Pro Pro
          180          185          190
Leu Gln Glu Ala Gly Ser Lys Lys Gly Arg Glu Ser Val Pro Thr Lys
          195          200          205
Pro Thr Pro Gly Glu Arg Arg Tyr Ile Cys Ala Glu Cys Gly Lys Ala
210          215          220
Phe Ser Asn Ser Ser Asn Leu Thr Lys His Arg Arg Thr His Thr Gly
225          230          235          240
Glu Lys Pro Tyr Val Cys Thr Lys Cys Gly Lys Ala Phe Ser His Ser

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245 250 255
 Ser Asn Leu Thr Leu His Tyr Arg Thr His Leu Val Asp Arg Pro Tyr
 260 265 270
 Asp Cys Lys Cys Gly Lys Ala Phe Gly Gln Ser Ser Asp Leu Leu Lys
 275 280 285
 His Gln Arg Met His Thr Glu Glu Ala Pro Tyr Gln Cys Lys Asp Cys
 290 295 300
 Gly Lys Ala Phe Ser Gly Lys Gly Ser Leu Ile Arg His Tyr Arg Ile
 305 310 315 320
 His Thr Gly Glu Lys Pro Tyr Gln Cys Asn Glu Cys Gly Lys Ser Phe
 325 330 335
 Ser Gln His Ala Gly Leu Ser Ser His Gln Arg Leu His Thr Gly Glu
 340 345 350
 Lys Pro Tyr Lys Cys Lys Glu Cys Gly Lys Ala Phe Asn His Ser Ser
 355 360 365
 Asn Phe Asn Lys His His Arg Ile His Thr Gly Glu Lys Pro Tyr Trp
 370 375 380
 Cys His His Cys Gly Lys Thr Phe Cys Ser Lys Ser Asn Leu Ser Lys
 385 390 395 400
 His Gln Arg Val His Thr Gly Glu Gly Glu Ala Pro
 405 410

<210> 131
 <211> 724
 <212> DNA
 <213> Homo Sapiens

<400> 131
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 tgatattcag gacctcctgg agagtgtcag gctggacaaa gaaaaagcag agactttggc 120
 tagtagcttg caggaagatc tggctcatcac ccgaaatgat gccaatcgat tacaggatgc 180
 cattgctaag gtagaggatg aataccgagc cttccaagaa gaagctaaga aacaaattga 240
 agatttgaat atgacgttag aaaaattaag atcagacctg gatgaaaaag aaacagaaaag 300
 gagtgacatg aaagaaacca tctttgaact tgaagatgaa gtagaacaac atcgtgctgt 360
 gaaacttcat gacaacctca ttatttctga tctagagaat acagttaaaa aactccagga 420
 ccaaaagcac gacatggaaa gagaaataaa gacactccac agaagacttc gggaagaatc 480
 tgcggaatgg cggcagtttc aggctgatct ccagactgca gtagtcattg caaatgacat 540
 taaatctgaa gcccaagagg agattggtga tctaaagcgc cgggtacatg aggctcaaga 600
 aaaaaatgag aaactcacia aagaattgga ggaaataagt ccgccaagcc agaagangac 660
 gangccggta ttccantaca tgnatgcccg tgagagagaa tttggcaggc cttaaggcag 720
 ggaa 724

<210> 132
 <211> 218
 <212> PRT
 <213> Homo Sapiens

<400> 132
 Glu Asn Glu Lys Gln Lys Val Ala Glu Leu Tyr Ser Ile His Asn Ser
 1 5 10 15
 Gly Asp Lys Ser Asp Ile Gln Asp Leu Leu Glu Ser Val Arg Leu Asp
 20 25 30
 Lys Glu Lys Ala Glu Thr Leu Ala Ser Ser Leu Gln Glu Asp Leu Ala
 35 40 45
 His Thr Arg Asn Asp Ala Asn Arg Leu Gln Asp Ala Ile Ala Lys Val


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<210> 133
<211> 719
<212> DNA
<213> Homo Sapiens-
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<210> 134
<211> 217
<212> PRT
<213> Homo Sapiens
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-99-

Val Gln Ser Ser Thr Pro Glu Gln Ser Pro Glu Glu Thr Thr Gln Ser
65 70 75 80
Pro Asp Leu Gly Ala Pro Ala Glu Gln Arg Pro His Gln Glu Glu Glu
85 90 95
Leu Gln Thr Leu Gln Glu Ser Glu Val Pro Val Pro Glu Asp Pro Asp
100 105 110
Leu Pro Ala Glu Arg Ser Ser Gly Asp Ser Glu Met Val Ala Leu Leu
115 120 125
Thr Ala Leu Ser Gln Gly Leu Val Thr Phe Lys Asp Val Ala Val Cys
130 135 140
Phe Ser Gln Asp Gln Trp Ser Asp Leu Asp Pro Thr Gln Lys Glu Phe
145 150 155 160
Tyr Gly Glu Tyr Val Leu Glu Glu Asp Cys Gly Ile Val Val Ser Leu
165 170 175
Ser Phe Pro Ile Pro Arg Pro Asp Glu Ile Ser Gln Val Arg Glu Glu
180 185 190
Glu Pro Leu Gly Pro Arg Tyr Pro Arg Ala Gly Asp Ser Arg Ala Arg
195 200 205
Asn Pro Glu Phe Tyr Leu His Arg Arg
210 215

<210> 135
<211> 1027
<212> DNA
<213> Homo Sapiens

<400> 135
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actacgacgc cggcaggtac agcccgcggc tgctcacggc gcacgagctg cactggacg 120
cgcacgtgct ggaaccgat gaggacctgc agcgcctgca gctctcgcgc cagcagctcc 180
agggtcacggg agacgccagc gagagcgccg aggacatctt cttccggcgg gccaaaggagg 240
gcatgggcca ggacgaggcg cagttcagcg tggagatgcc actcaccggc aaggcctacc 300
tgtggggcca caagtaccgg ccacgcaagc cgcgcttctt caaccgcgtg cacacgggct 360
tcgagtggaa caagtacaac cagacgcact acgactttga caaccaccg cccaagatcg 420
tgcagggata caagttcaac atctttctacc ccgacctcat cgacaagcgc tccacgcccg 480
agtacttcct ggaggcctgc gccgacaaca aggatttcgc catcctgcgc ttcacgcggg 540
gccgcctacg aggacatcgc tttcaagatc gtcaaccgcg agtggggaata ctngcaccgc 600
cacggcttcc gctgccagtt tgccaacggc attttccanc tngctttca cttcaagcgc 660
tnccgctatc ggcggtgacg gccctgggga acggcaggcc aggagggcgg agggccacac 720
gggtgccaca gccaggtcg gactgggcca gccggcaggc ttgtttttca gcatccgacg 780
ggaacatctc caacagaagc aaaacggaaa gtgcctcccg gaccccaga gggccacca 840
acctcaccag tcaccagccc cagaccaccc acagcccctc ccagacaccc cgcctcatct 900
ggaaatagtt ccgtttgttt ctctaaaaag acttgtaggt gggaaaaaaa atcttttggt 960
ctcatggaat tggcctattg gcaagatcgc atgttttttt aataaacggt gtattttaga 1020
ataaaaaa 1027

<210> 136
<211> 299
<212> PRT
<213> Homo Sapiens

<400> 136
Glu Gly Glu Gly Glu Ala Val Leu Met Glu Glu Asp Leu Ile Gln Gln
1 5 10 15
Ser Leu Asp Asp Tyr Asp Ala Gly Arg Tyr Ser Pro Arg Leu Leu Thr

20 25 30
 Ala His Glu Leu Pro Leu Asp Ala His Val Leu Glu Pro Asp Glu Asp
 35 40 45
 Leu Gln Arg Leu Gln Leu Ser Arg Gln Gln Leu Gln Val Thr Gly Asp
 50 55 60
 Ala Ser Glu Ser Ala Glu Asp Ile Phe Phe Arg Arg Ala Lys Glu Gly
 65 70 75 80
 Met Gly Gln Asp Glu Ala Gln Phe Ser Val Glu Met Pro Leu Thr Gly
 85 90 95
 Lys Ala Tyr Leu Trp Ala Asp Lys Tyr Arg Pro Arg Lys Pro Arg Phe
 100 105 110
 Phe Asn Arg Val His Thr Gly Phe Glu Trp Asn Lys Tyr Asn Gln Thr
 115 120 125
 His Tyr Asp Phe Asp Asn Pro Pro Lys Ile Val Gln Gly Tyr Lys
 130 135 140
 Phe Asn Ile Phe Tyr Pro Asp Leu Ile Asp Lys Arg Ser Thr Pro Glu
 145 150 155 160
 Tyr Phe Leu Glu Ala Cys Ala Asp Asn Lys Asp Phe Ala Ile Leu Arg
 165 170 175
 Phe Thr Arg Gly Arg Leu Arg Gly His Arg Phe Gln Asp Arg Gln Pro
 180 185 190
 Arg Val Gly Ile Leu Ala Pro Pro Arg Leu Pro Leu Pro Val Cys Gln
 195 200 205
 Arg His Phe Pro Leu Ser Leu Gln Ala Leu Pro Leu Ser Ala Val Thr
 210 215 220
 Ala Leu Gly Asn Gly Arg Pro Gly Gly Pro Arg Ala Thr Arg Val Pro
 225 230 235 240
 Gln Pro Arg Ser Glu Trp Pro Ser Arg Gln Ala Cys Phe Ser Ala Ser
 245 250 255
 Asp Gly Asn Ile Ser Asn Arg Ser Lys Thr Glu Ser Ala Ser Arg Thr
 260 265 270
 Pro Arg Gly Pro Pro Asn Leu Thr Ser His Gln Pro Gln Thr Thr His
 275 280 285
 Ser Pro Ser Gln Thr Pro Arg Leu Ile Trp Lys
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<210> 137

<211> 766

<212> DNA

<213> Homo Sapiens

<400> 137

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<210> 138
 <211> 243
 <212> PRT
 <213> Homo Sapiens

<400> 138
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 Leu Glu Ser Leu Leu Gly Thr Val Glu His Gln Phe Gly Ala Gln Gly
 35 40 45
 Asp Leu Thr Thr Glu Cys Ala Thr Ala Asn Asn Pro Thr Ala Ile Thr
 50 55 60
 Pro Asp Glu Tyr Phe Asn Glu Glu Phe Asp Leu Lys Asp Arg Asp Ile
 65 70 75 80
 Gly Arg Pro Lys Glu Leu Thr Ile Arg Thr Gln Lys Phe Lys Ala Met
 85 90 95
 Leu Trp Met Cys Glu Glu Phe Pro Leu Ser Leu Val Glu Gln Val Ile
 100 105 110
 Pro Ile Ile Asp Leu Met Ala Arg Thr Ser Ala His Phe Ala Arg Leu
 115 120 125
 Arg Asp Phe Ile Lys Leu Glu Phe Pro Pro Gly Phe Pro Val Lys Ile
 130 135 140
 Ala Ser His Ile Thr Asn Phe Glu Val Asp Gln Ser Val Phe Glu Ile
 145 150 155 160
 Pro Glu Ser Tyr Tyr Val Gln Asp Asn Gly Arg Asn Val His Leu Gln
 165 170 175
 Asp Glu Asp Tyr Glu Ile Met Gln Phe Ala Ile Gln Gln Ser Leu Leu
 180 185 190
 Glu Ser Ser Arg Ser Gln Glu Leu Ser Gly Pro Ala Ser Asn Gly Gly
 195 200 205
 Ile Ser Gln Thr Asn Thr Tyr Asp Ala Gln Tyr Glu Arg Ala Gln Glu
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 Ser Leu Leu Pro Ala Gln Lys Ala Cys Ala Pro Ser Ala Pro Glu Arg
 225 230 235 240
 Asp Pro Phe

<210> 139
 <211> 3060
 <212> DNA
 <213> Homo Sapiens

<400> 139
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<210> 140

<211> 872

<212> PRT

<213> Homo Sapiens

<400> 140

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20 25 30
Gln Glu Leu Glu Arg Cys Lys Ala Ser Ile Arg Arg Leu Glu Gln Glu
35 40 45
Val Asn Gln Glu Arg Phe Arg Met Ile Tyr Leu Gln Thr Leu Leu Ala

50	55	60
Lys Glu Lys Lys Ser Tyr Asp Arg Gln Arg Trp Gly Phe Arg Arg Ala		
65	70	75
Ala Gln Ala Pro Asp Gly Ala Ser Glu Pro Arg Ala Ser Ala Ser Arg		80
	85	90
Pro Gln Pro Ala Pro Ala Asp Gly Ala Asp Pro Pro Pro Ala Glu Glu		95
	100	105
Pro Glu Ala Arg Pro Asp Gly Glu Gly Ser Pro Gly Lys Ala Arg Pro		110
	115	120
Gly Thr Ala Arg Arg Pro Gly Ala Ala Ala Ser Gly Glu Arg Asp Asp		125
	130	135
Arg Gly Pro Pro Ala Ser Val Ala Ala Leu Arg Ser Asn Phe Glu Arg		140
145	150	155
Ile Arg Lys Gly His Gly Gln Pro Gly Ala Asp Ala Glu Lys Pro Phe		160
	165	170
Tyr Val Asn Val Glu Phe His His Glu Arg Gly Leu Val Lys Val Asn		175
	180	185
Asp Lys Glu Val Ser Asp Arg Ile Ser Ser Leu Gly Ser Gln Ala Met		190
	195	200
Gln Met Glu Arg Lys Lys Ser Gln His Gly Ala Gly Ser Ser Val Gly		205
	210	215
Asp Ala Ser Arg Pro Pro Tyr Arg Gly Arg Ser Ser Glu Ser Ser Cys		220
225	230	235
Gly Val Asp Gly Asp Tyr Glu Asp Ala Glu Leu Asn Pro Arg Phe Leu		240
	245	250
Lys Asp Asn Leu Ile Asp Ala Asn Gly Gly Ser Arg Pro Pro Trp Pro		255
	260	265
Pro Leu Glu Tyr Gln Pro Tyr Gln Ser Ile Tyr Val Gly Gly Met Met		270
	275	280
Glu Gly Glu Gly Lys Gly Pro Leu Leu Arg Ser Gln Ser Thr Ser Glu		285
	290	295
Gln Glu Lys Arg Leu Thr Trp Pro Arg Arg Ser Tyr Ser Pro Arg Ser		300
305	310	315
Phe Glu Asp Cys Gly Gly Gly Tyr Thr Pro Asp Cys Ser Ser Asn Glu		320
	325	330
Asn Leu Thr Ser Ser Glu Glu Asp Phe Ser Ser Gly Gln Ser Ser Arg		335
	340	345
Val Ser Pro Ser Pro Thr Thr Tyr Arg Met Phe Arg Asp Lys Ser Arg		350
	355	360
Ser Pro Ser Gln Asn Ser Gln Gln Ser Phe Asp Ser Ser Ser Pro Pro		365
	370	375
Thr Pro Gln Cys His Lys Arg His Arg His Cys Pro Val Val Val Ser		380
385	390	395
Glu Ala Thr Ile Val Gly Val Arg Lys Thr Gly Gln Ile Trp Pro Asn		400
	405	410
Asp Gly Glu Gly Ala Phe His Gly Asp Ala Asp Gly Ser Phe Gly Thr		415
	420	425
Pro Pro Gly Tyr Gly Cys Ala Ala Asp Arg Ala Glu Glu Gln Arg Arg		430
	435	440
His Gln Asp Gly Leu Pro Tyr Ile Asp Asp Ser Pro Ser Ser Ser Pro		445
	450	455
His Leu Ser Ser Lys Gly Arg Gly Ser Arg Asp Ala Leu Val Ser Gly		460
465	470	475
Ala Leu Glu Ser Thr Lys Ala Ser Glu Leu Asp Leu Glu Lys Gly Leu		480
	485	490
		495

Glu Met Arg Lys Trp Val Leu Ser Gly Ile Leu Ala Ser Glu Glu Thr
 500 505 510
 Tyr Leu Ser His Leu Glu Ala Leu Leu Leu Pro Met Lys Pro Leu Lys
 515 520 525
 Ala Ala Ala Thr Thr Ser Gln Pro Val Leu Thr Ser Gln Gln Ile Glu
 530 535 540
 Thr Ile Phe Phe Lys Val Pro Glu Leu Tyr Glu Ile His Lys Glu Phe
 545 550 555 560
 Tyr Asp Gly Leu Phe Pro Arg Val Gln Gln Trp Ser His Gln Gln Arg
 565 570 575
 Val Gly Asp Leu Phe Gln Lys Leu Ala Ser Gln Leu Gly Val Tyr Arg
 580 585 590
 Ala Phe Val Asp Asn Tyr Gly Val Ala Met Glu Met Ala Glu Lys Cys
 595 600 605
 Cys Gln Ala Asn Ala Gln Phe Ala Glu Ile Ser Glu Asn Leu Arg Ala
 610 615 620
 Arg Ser Asn Lys Asp Ala Lys Asp Pro Thr Thr Lys Asn Ser Leu Glu
 625 630 635 640
 Thr Leu Leu Tyr Lys Pro Val Asp Arg Val Thr Arg Ser Thr Leu Val
 645 650 655
 Leu His Asp Leu Leu Lys His Thr Pro Ala Ser His Pro Asp His Pro
 660 665 670
 Leu Leu Gln Asp Ala Leu Arg Ile Ser Gln Asn Phe Leu Ser Ser Ile
 675 680 685
 Asn Glu Glu Ile Thr Pro Arg Arg Gln Ser Met Thr Val Lys Lys Gly
 690 695 700
 Glu His Arg Gln Leu Leu Lys Asp Ser Phe Met Val Glu Leu Val Glu
 705 710 715 720
 Gly Ala Arg Lys Leu Arg His Val Phe Leu Phe Thr Glu Leu Leu Leu
 725 730 735
 Cys Thr Lys Leu Lys Lys Gln Ser Gly Gly Lys Thr Gln Gln Tyr Asp
 740 745 750
 Cys Lys Trp Tyr Ile Pro Leu Thr Asp Leu Ser Phe Gln Met Val Asp
 755 760 765
 Glu Leu Glu Ala Val Pro Asn Ile Pro Leu Val Pro Asp Glu Glu Leu
 770 775 780
 Asp Ala Leu Lys Ile Lys Ile Ser Gln Ile Lys Ser Asp Ile Gln Arg
 785 790 795 800
 Glu Lys Arg Ala Asn Lys Gly Ser Lys Ala Thr Glu Arg Leu Lys Lys
 805 810 815
 Lys Leu Ser Glu Gln Glu Ser Leu Leu Leu Leu Met Ser Pro Ser Met
 820 825 830
 Ala Phe Arg Val His Ser Arg Asn Gly Lys Ser Tyr Thr Phe Leu Ile
 835 840 845
 Ser Ser Asp Tyr Glu Arg Ala Glu Trp Arg Glu Asn Ile Arg Glu Gln
 850 855 860
 Gln Lys Lys Cys Phe Arg Ser Phe
 865 870

<210> 141

<211> 691

<212> DNA

<213> Homo Sapiens

<400> 141

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gttggagttc gatcttttcc cgacgtctac ttccctgagt cccttctacc ttcgccacc 180
ctccttctctg cgggcaccca gctgggttga cactggactc tcagagatgc gcctggagaa 240
ggacaggttc tctgtcaacc tggatgtgaa gcacttctcc ccagaggaaac tcaaagttaa 300
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cattacttca tccctgtcat ctgatgggtt cctcactgtg aatggaccaaa ggaaacaggt 480
ctctggccct gagcgacca ttcccatcac ccgtgaagag aagcctgctg tcaccgcagc 540
ccccaagaaa tagatgccct ttcttgaatt gcatttttta aaacaagaaa gtttccccac 600
cagtgaatga aagtcttgtg actagtgtg aagcttatta atgctaaggg caggcccaaa 660
ttatcaagct aataaaatat cattcagcaa c 691

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<210> 142

<211> 175

<212> PRT

<213> Homo Sapiens

<400> 142

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Met Asp Ile Ala Ile His His Pro Trp Ile Arg Arg Pro Phe Phe Pro
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Phe His Ser Pro Ser Arg Leu Phe Asp Gln Phe Phe Gly Glu His Leu
20        25        30
Leu Glu Ser Asp Leu Phe Pro Thr Ser Thr Ser Leu Ser Pro Phe Tyr
35        40        45
Leu Arg Pro Pro Ser Phe Leu Arg Ala Pro Ser Trp Phe Asp Thr Gly
50        55        60
Leu Ser Glu Met Arg Leu Glu Lys Asp Arg Phe Ser Val Asn Leu Asp
65        70        75        80
Val Lys His Phe Ser Pro Glu Glu Leu Lys Val Lys Val Leu Gly Asp
85        90        95
Val Ile Glu Val His Gly Lys His Glu Glu Arg Gln Asp Glu His Gly
100       105       110
Phe Ile Ser Arg Glu Phe His Arg Lys Tyr Arg Ile Pro Ala Asp Val
115       120       125
Asp Pro Leu Thr Ile Thr Ser Ser Leu Ser Ser Asp Gly Val Leu Thr
130       135       140
Val Asn Gly Pro Arg Lys Gln Val Ser Gly Pro Glu Arg Thr Ile Pro
145       150       155       160
Ile Thr Arg Glu Glu Lys Pro Ala Val Thr Ala Ala Pro Lys Lys
165       170       175

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<210> 143

<211> 1300

<212> DNA

<213> Homo Sapiens

<400> 143

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tcctggatta cttttcagaa agaagtaatc ctttttatga cagaacatgt aataatgaag 120
tggtcaaaat gcagaggcta acattagaac acttgaatca gatggttgga atcgagtaca 180
tccttttgca tgctcaagag ccattcttt tcatcattcg gaagcaacag cggcagtccc 240
ctgcccaagt tatccacta gctgattact atatcattgc tggagtgatc tatcaggcac 300
cagacttggg atcagttata aactctagag tgcttactgc agtgcattgg attcagtcag 360
cttttgatga agctatgtca tactgtcgat atcatccttc caaagggtat tggtggcact 420

```



```

tcaaagatca tgaagagcaa gataaagtca gacctaaagc caaaaggaaa gaagaaccaa      480
gctctatttt tcagagacaa cgtgtggatg ctttactttt agacctcaga caaaaatttc      540
cacccaaatt tgtgcagcta aagcctggag aaaagcctgt tcaagtggat caaacaaaga      600
aagaggcaga acctatacca gaaactgtaa aacctgagga gaaggagacc ccnnnagaat      660
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gctcttgagc tttgaagtac tttattgtaa ccttcttatt tgtatggaat gcgcttattt      840
tttgaaagga tattaggccg gatgtggtgg ctcacgcctg taatcccagc actttgggag      900
gccatggcgg gtggatcact tgaggtcaga agttcaagac cagcctgacc aatatggtga      960
aaccctgtct ctactaaaaa tacaaaaatt agccgggcgt ggtggcgggc gcccgtagtc     1020
ccagctactc gggaggctga gacaggagac ttgcttgaac ccgggaggtg gaggttgccc     1080
tgagctgatt atcatgctgt tgcactccag cttgggcgac agagcgagac tttgtctcaa     1140
aaaagaagaa aagatattac tcccatcatg atttcttgtg aatatttgtt atatgtcttc     1200
tgtaaccttt cctctcccg acttgagcaa cctacacact cacatgttta ctggtagata     1260
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<210> 144

<211> 233

<212> PRT

<213> Homo Sapiens

<400> 144

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Ser Gly Ser Val Leu Asp Tyr Phe Ser Glu Arg Ser Asn Pro Phe Tyr
              20              25              30
Asp Arg Thr Cys Asn Asn Glu Val Val Lys Met Gln Arg Leu Thr Leu
              35              40              45
Glu His Leu Asn Gln Met Val Gly Ile Glu Tyr Ile Leu Leu His Ala
              50              55              60
Gln Glu Pro Ile Leu Phe Ile Ile Arg Lys Gln Gln Arg Gln Ser Pro
65              70              75              80
Ala Gln Val Ile Pro Leu Ala Asp Tyr Tyr Ile Ile Ala Gly Val Ile
              85              90              95
Tyr Gln Ala Pro Asp Leu Gly Ser Val Ile Asn Ser Arg Val Leu Thr
              100              105              110
Ala Val His Gly Ile Gln Ser Ala Phe Asp Glu Ala Met Ser Tyr Cys
              115              120              125
Arg Tyr His Pro Ser Lys Gly Tyr Trp Trp His Phe Lys Asp His Glu
              130              135              140
Glu Gln Asp Lys Val Arg Pro Lys Ala Lys Arg Lys Glu Glu Pro Ser
145              150              155              160
Ser Ile Phe Gln Arg Gln Arg Val Asp Ala Leu Leu Leu Asp Leu Arg
              165              170              175
Gln Lys Phe Pro Pro Lys Phe Val Gln Leu Lys Pro Gly Glu Lys Pro
              180              185              190
Val Gln Val Asp Gln Thr Lys Lys Glu Ala Glu Pro Ile Pro Glu Thr
              195              200              205
Val Lys Pro Glu Glu Lys Glu Thr Pro Glu Cys Thr Thr Arg Pro Gly
              210              215              220
Val Leu Lys Ala Pro Leu Lys Asn Gly
225              230

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<210> 145

<211> 1528

<212> DNA

<213> Homo Sapiens

<400> 145

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gcggccaact ccaatgggccc tttccagccc gtggtccttc tccatattcg agatgttctt      180
cctgctgac aagagaagct ttttatccag aagttacgtc agtggttgcgt cctctttgac      240
tttgtttctg atccactaag tgacctaaag tggaaggaag taaaacgagc tgctttaagt      300
gaaatggtag aatatatcac ccataatcgg aatgtgatca cagagcctat ttaccagaa      360
gtagtccata tgtttgcagt taacatgttt cgaacattac caccttcttc caatcctacg      420
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cagcttgttt atgaattttt cttaagattt ttagagtctc cagatttcca acctaataa      540
gcgaagaaat atattgatca gaagtttgta ttgcagcttt tagagctctt tgacagttaa      600
gatcctcggg agagagattt tcttaaaacc acccttcaca gaatctatgg gaaattccta      660
ggcttgagag cttacatcag aaaacagata aataatatat tttatagggt tatttatgaa      720
acagagcatc ataatggcat agcagagtta ctggaaatat tgggaagtat aattaatgga      780
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ttagaaaagg acagaccct caccggaacca gtggtgatgg cacttctcaa atactggcca      960
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attgaaccat cagaatttgt gaagatcatg gaaccctct tccggcagtt ggccaaatgt.     1080
gtctccagcc cacacttcca ggtggcagag cgagctctct attactggaa taatgaatac     1140
atcatgagtt taatcagtga caacgcagcg aagattctgc ccatcatgtt tcttctcttg     1200
taccgcaact caaagacca ttggaacaag acaatacatg gcttgatata caacgccttg     1260
aagctcttca tggagatgaa ccaaaagcta tttgatgact gtacacaaca gttcaaagca     1320
gagaaactaa aagagaagct aaaaatgaaa gaacgggaag aagcatgggt taaaatagaa     1380
aatctagcca aagccaatcc ccaggtacta aaaaagagaa taacatgaaa aggcccaggg     1440
ttacttgaat gtttttataa gataggaata tatgtcttca ccatgggggg ggtctcgatt     1500
tcactaacgt tgtatatgaa aatgtctg                                     1528

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<210> 146

<211> 449

<212> PRT

<213> Homo Sapiens

<400> 146

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      20              25              30
Val Pro Pro Ala Asp Gln Glu Lys Leu Phe Ile Gln Lys Leu Arg Gln
      35              40              45
Cys Cys Val Leu Phe Asp Phe Val Ser Asp Pro Leu Ser Asp Leu Lys
      50              55              60
Trp Lys Glu Val Lys Arg Ala Ala Leu Ser Glu Met Val Glu Tyr Ile
65              70              75              80
Thr His Asn Arg Asn Val Ile Thr Glu Pro Ile Tyr Pro Glu Val Val
      85              90              95
His Met Phe Ala Val Asn Met Phe Arg Thr Leu Pro Pro Ser Ser Asn
      100             105             110
Pro Thr Gly Ala Glu Phe Asp Pro Glu Glu Asp Glu Pro Thr Leu Glu
      115             120             125
Ala Ala Trp Pro His Leu Gln Leu Val Tyr Glu Phe Phe Leu Arg Phe
      130             135             140

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Leu Glu Ser Pro Asp Phe Gln Pro Asn Ile Ala Lys Lys Tyr Ile Asp
 145 150 155 160
 Gln Lys Phe Val Leu Gln Leu Leu Glu Leu Phe Asp Ser Glu Asp Pro
 165 170 175
 Arg Glu Arg Asp Phe Leu Lys Thr Thr Leu His Arg Ile Tyr Gly Lys
 180 185 190
 Phe Leu Gly Leu Arg Ala Tyr Ile Arg Lys Gln Ile Asn Asn Ile Phe
 195 200 205
 Tyr Arg Phe Ile Tyr Glu Thr Glu His His Asn Gly Ile Ala Glu Leu
 210 215 220
 Leu Glu Ile Leu Gly Ser Ile Ile Asn Gly Phe Ala Leu Pro Leu Lys
 225 230 235 240
 Glu Glu His Lys Ile Phe Leu Leu Lys Val Leu Leu Pro Leu His Lys
 245 250 255
 Val Lys Ser Leu Ser Val Tyr His Pro Gln Leu Ala Tyr Cys Val Val
 260 265 270
 Gln Phe Leu Glu Lys Asp Ser Thr Leu Thr Glu Pro Val Val Met Ala
 275 280 285
 Leu Leu Lys Tyr Trp Pro Lys Thr His Ser Pro Lys Glu Val Met Phe
 290 295 300
 Leu Asn Glu Leu Glu Glu Ile Leu Asp Val Ile Glu Pro Ser Glu Phe
 305 310 315 320
 Val Lys Ile Met Glu Pro Leu Phe Arg Gln Leu Ala Lys Cys Val Ser
 325 330 335
 Ser Pro His Phe Gln Val Ala Glu Arg Ala Leu Tyr Tyr Trp Asn Asn
 340 345 350
 Glu Tyr Ile Met Ser Leu Ile Ser Asp Asn Ala Ala Lys Ile Leu Pro
 355 360 365
 Ile Met Phe Pro Ser Leu Tyr Arg Asn Ser Lys Thr His Trp Asn Lys
 370 375 380
 Thr Ile His Gly Leu Ile Tyr Asn Ala Leu Lys Leu Phe Met Glu Met
 385 390 395 400
 Asn Gln Lys Leu Phe Asp Asp Cys Thr Gln Gln Phe Lys Ala Glu Lys
 405 410 415
 Leu Lys Glu Lys Leu Lys Met Lys Glu Arg Glu Glu Ala Trp Val Lys
 420 425 430
 Ile Glu Asn Leu Ala Lys Ala Asn Pro Gln Val Leu Lys Lys Arg Ile
 435 440 445
 Thr

<210> 147

<211> 1580

<212> DNA

<213> Homo Sapiens

<400> 147

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catgctccat	cgcctgggaa	atttggtgag	cggcctccac	ctaaacgact	tactagggaa	180
gctatgcgaa	attattttaa	agagcgaggg	gatcaaacag	tacttattct	tcatgcaaaa	240
gttgacacaga	agtcatatgg	aaatgaaaaa	agggtttttt	gcccacctcc	ttgtgtatat	300
cttatgggca	gcggatggaa	gaaaaaaaaa	gaacaaatgg	aacgcgatgg	ttgttctgaa	360
caagagtctc	aaccgtgtgc	atttattggg	ataggaaata	gtgaccaaga	aatgcagcag	420
ctaaacttgg	aaggaaagaa	ctattgcaca	gccaaaacat	tgtatatatc	tgactcagac	480

225 230 235 240
 Tyr Ile His Tyr Gly Gln Thr Cys Lys Leu Val Cys Ser Val Thr Gly
 245 250 255
 Met Ala Leu Pro Arg Leu Ile Ile Met Lys Val Asp Lys His Thr Ala
 260 265 270
 Leu Leu Asp Ala Asp Asp Pro Val Ser Gln Leu His Lys Cys Ala Phe
 275 280 285
 Tyr Leu Lys Asp Thr Glu Arg Met Tyr Leu Cys Leu Ser Gln Glu Arg
 290 295 300
 Ile Ile Gln Phe Gln Ala Thr Pro Cys Pro Lys Glu Pro Asn Lys Glu
 305 310 315 320
 Met Ile Asn Asp Gly Ala Ser Trp Thr Ile Ile Ser Thr Asp Lys Ala
 325 330 335
 Glu Tyr Thr Phe Tyr Glu Gly Met Gly Pro Val Leu Ala Pro Val Thr
 340 345 350
 Pro Val Pro Val Val Glu Ser Leu Gln Leu Asn Gly Gly Gly Asp Val
 355 360 365
 Ala Met Leu Glu Leu Thr Gly Gln Asn Phe Thr Pro Asn Leu Arg Val
 370 375 380
 Trp Phe Gly Asp Val Glu Ala Glu Thr Met Tyr Arg Cys Gly Glu Ser
 385 390 395 400
 Met Leu Cys Val Val Pro Asp Ile Ser Ala Phe Arg Glu Gly Trp Arg
 405 410 415
 Trp Val Arg Gln Pro Val Gln Val Pro Val Thr Leu Val Arg Asn Asp
 420 425 430
 Gly Ile Ile Tyr Ser Thr Ser Leu Thr Phe Thr Tyr Thr Pro Glu Pro
 435 440 445
 Gly Pro Arg Pro His Cys Ser Val Ala Gly Ala Ile Leu Pro Ala Asn
 450 455 460
 Ser Ser Gln Val Pro Pro Asn Glu Ser Asn Thr Asn Ser Glu Gly Ser
 465 470 475 480
 Tyr Thr Asn Ala Ser Thr Asn Ser Thr Ser Val Thr Ser Ser Thr Ala
 485 490 495
 Thr Val Val Ser
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<210> 149

<211> 1248

<212> DNA

<213> Homo Sapiens

<400> 149

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 gacaaggagc gggtcgcgct ggtggtgcac ccgggcacgg cacggctggg gagcccgagc 180
 gaggagtctt tccacaaggt ccggacaatt cgtcagacta ttgtcaaact ggggaataaa 240
 gtccaggagt tggagaaaca gcaggtcacc atcctggcca cgcccccttc cgaggagagc 300
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 ctgcagctga aggccataga gccccagaag gaggaagctg atgagaacta taactccgtc 420
 aacacaagaa tgagaaaaac ccagcatggg gtccctgtccc agcaattcgt ggagctcatc 480
 aacaagtgca attcaatgca gtccgaatac cgggagaaga acgtggagcg gattcggagg 540
 cagctgaaga tcaccaatgc tggcatggtg tctgatgagg agttggatca gatgctggac 600
 agtgggcaaa gcgaggtggt tgtgtccaat atccttaagg acacgcaggg gactcgacag 660
 gccttaaagt agatctcggc ccggcacagt gagatccagc agcttgaacg cagtattcgt 720
 gagctgcacg acatattcac ttttctggct accgaagtgg agatgcaggg ggagatgatac 780

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aatcggattg agaagaacat cctgagctca gcggactacg tggaacgtgg gcaggagcac      840
gtcaagacgg ccctggagaa ccagaagaag gtgaggaaga agaaagtctt gattgccatc      900
tgtgtgtcca tcaccgtcgt cctcctagca gtcattcatt gcgtcacagt ggttggataa      960
tgtgcacat  tgttggcact aggagcacca ggaacccagg gcctggcctt ctctcccagc     1020
agcctggggg gcaggcagag cctccagtcg gaccccttcc tcacacactg gcccctatgc     1080
agaagggcag acagtctctc tggggttggc agctgctcat tcatgatggc ctctccttcc     1140
aggcctcaat gcctggggga ggctgcact gtcctgattg gccgggacac acggttttgt     1200
aaaaaattaa aaaacaaaaa aagagcatag aaaaaaaaaa aaccgagt      1248

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<210> 150

<211> 297

<212> PRT

<213> Homo Sapiens

<400> 150

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Met Arg Asp Arg Thr His Glu Leu Arg Gln Gly Asp Asp Ser Ser Asp
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Glu Glu Asp Lys Glu Arg Val Ala Leu Val Val His Pro Gly Thr Ala
 20      25      30
Arg Leu Gly Ser Pro Asp Glu Glu Phe Phe His Lys Val Arg Thr Ile
 35      40      45
Arg Gln Thr Ile Val Lys Leu Gly Asn Lys Val Gln Glu Leu Glu Lys
 50      55      60
Gln Gln Val Thr Ile Leu Ala Thr Pro Leu Pro Glu Glu Ser Met Lys
 65      70      75      80
Gln Glu Leu Gln Asn Leu Arg Asp Glu Ile Lys Gln Leu Gly Arg Glu
 85      90      95
Ile Arg Leu Gln Leu Lys Ala Ile Glu Pro Gln Lys Glu Glu Ala Asp
100      105      110
Glu Asn Tyr Asn Ser Val Asn Thr Arg Met Arg Lys Thr Gln His Gly
115      120      125
Val Leu Ser Gln Gln Phe Val Glu Leu Ile Asn Lys Cys Asn Ser Met
130      135      140
Gln Ser Glu Tyr Arg Glu Lys Asn Val Glu Arg Ile Arg Arg Gln Leu
145      150      155      160
Lys Ile Thr Asn Ala Gly Met Val Ser Asp Glu Glu Leu Asp Gln Met
165      170      175
Leu Asp Ser Gly Gln Ser Glu Val Phe Val Ser Asn Ile Leu Lys Asp
180      185      190
Thr Gln Val Thr Arg Gln Ala Leu Asn Glu Ile Ser Ala Arg His Ser
195      200      205
Glu Ile Gln Gln Leu Glu Arg Ser Ile Arg Glu Leu His Asp Ile Phe
210      215      220
Thr Phe Leu Ala Thr Glu Val Glu Met Gln Gly Glu Met Ile Asn Arg
225      230      235      240
Ile Glu Lys Asn Ile Leu Ser Ser Ala Asp Tyr Val Glu Arg Gly Gln
245      250      255
Glu His Val Lys Thr Ala Leu Glu Asn Gln Lys Lys Val Arg Lys Lys
260      265      270
Lys Val Leu Ile Ala Ile Cys Val Ser Ile Thr Val Val Leu Leu Ala
275      280      285
Val Ile Ile Gly Val Thr Val Val Gly
290      295

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<210> 151

<211> 1953

<212> DNA

<213> Homo Sapiens

<400> 151

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ccaacctgcc ggccatggag accccgtccc agcggcgcg caccgcagc ggggcgagg      180
ccagctccac tccgctgtcg cccaccgca tcaccggct gcaggagaag gaggacctgc      240
aggagctcaa tgatcgcttg gcggtctaca tcgaccgtgt gcgctcgctg gaaacggaga      300
acgcagggct gcgccttcgc atcaccgagt ctgaagaggt ggtcagccgc gaggtgtccg      360
gcatcaaggc cgcctacgag gccgagctcg gggatgcccg caagaccctt gactcagtag      420
ccaaggagcg cgcccgccctg cagctggagc tgagcaaagt gcgtgaggag tttaaggagc      480
tgaaagcgcg caataccaag aaggaggggt acctgatagc tgctcaggct cggctgaagg      540
acctggaggc tctgctgaac tccaaggagg ccgcactgag cactgctctc agtgagaagc      600
gcacgctgga gggcgagctg catgatctgc ggggccagggt ggccaagctt gaggcagccc      660
taggtgaggc caagaagcaa cttcaggatg agatgctgcg gcgggtggat gctgagaaca      720
ggctgcagac catgaaggag gaactggact tccagaagaa catctacagt gaggagctgc      780
gtgagaccaa gcgcgctcat gagaccgac tgggtggagat tgacaatggg aagcagcgtg      840
agtttgagag ccggctggcg gatgcgctgc aggaactgcg ggcccagcat gaggaccagg      900
tggagcagta taagaaggag ctggagaaga cttattctgc caagctggac aatgccaggc      960
agtctgctga taggaacagc aacctgggtg gggctgccc cgaggagctg cagcagtcgc      1020
gcatccgcat cgacagcctc tctgcccagc tcagccagct ccagaagcag ctggcagcca      1080
aggaggcgaa gcttcgagac ctggaggact cactggcccg tgagcgggac accagccggc      1140
ggctgctggc ggaaaaggag cgggagatgg ccgagatgcg ggcaaggatg cagcagcagc      1200
tggacgagta ccaggagctt ctggacatca agctggccct ggacatggag atccacgcct      1260
accgcaagct cttggagggc gaggaggaga ggctacgcct gtcccccagc cctacctcgc      1320
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ccaaaaagcg caaactggag tccactgaga gccgcagcag cttctcacag cagcagcga      1440
ctagcgggcg cgtggccgtg gaggaggtgg atgaggagg caagtttgct cggctgcgca      1500
acaagtccaa tgaggaccag tccatgggca attggcagat caagcgccag aatggagatg      1560
atcccttgct gacttacccg ttcccaccaa agttcaccc gaaggctggg caggtggtga      1620
cgatctgggc tgcaggagct ggggccaccc acagccccc taccgacctg gtgtggaagg      1680
cacagaacac ctggggctgc gggaacagcc tgcgtacggc tctcatcaac tccactgggg      1740
aagaagtggc catgcgcaag ctggtgcgct cagtgaactgt ggttgaggac gacgaggatg      1800
aggatggaga tgacctgctc catcaccacc acgtgagtgg tagccgcgc tgaggccgag      1860
cctgcactgg ggccaccagc caggcctggg ggcagcctct cccagcctc cccgtgcca      1920
aatcttttc attaaagaat gttttggaac ttt                                     1953

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<210> 152

<211> 572

<212> PRT

<213> Homo Sapiens

<400> 152

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Ser Ser Thr Pro Leu Ser Pro Thr Arg Ile Thr Arg Leu Gln Glu Lys
          20          25          30
Glu Asp Leu Gln Glu Leu Asn Asp Arg Leu Ala Val Tyr Ile Asp Arg
          35          40          45
Val Arg Ser Leu Glu Thr Glu Asn Ala Gly Leu Arg Leu Arg Ile Thr
          50          55          60
Glu Ser Glu Glu Val Val Ser Arg Glu Val Ser Gly Ile Lys Ala Ala
65           70           75           80

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Tyr Glu Ala Glu Leu Gly Asp Ala Arg Lys Thr Leu Asp Ser Val Ala
 85 90 95
 Lys Glu Arg Ala Arg Leu Gln Leu Glu Leu Ser Lys Val Arg Glu Glu
 100 105 110
 Phe Lys Glu Leu Lys Ala Arg Asn Thr Lys Lys Glu Gly Asp Leu Ile
 115 120 125
 Ala Ala Gln Ala Arg Leu Lys Asp Leu Glu Ala Leu Leu Asn Ser Lys
 130 135 140
 Glu Ala Ala Leu Ser Thr Ala Leu Ser Glu Lys Arg Thr Leu Glu Gly
 145 150 155 160
 Glu Leu His Asp Leu Arg Gly Gln Val Ala Lys Leu Glu Ala Ala Leu
 165 170 175
 Gly Glu Ala Lys Lys Gln Leu Gln Asp Glu Met Leu Arg Arg Val Asp
 180 185 190
 Ala Glu Asn Arg Leu Gln Thr Met Lys Glu Glu Leu Asp Phe Gln Lys
 195 200 205
 Asn Ile Tyr Ser Glu Glu Leu Arg Glu Thr Lys Arg Arg His Glu Thr
 210 215 220
 Arg Leu Val Glu Ile Asp Asn Gly Lys Gln Arg Glu Phe Glu Ser Arg
 225 230 235 240
 Leu Ala Asp Ala Leu Gln Glu Leu Arg Ala Gln His Glu Asp Gln Val
 245 250 255
 Glu Gln Tyr Lys Lys Glu Leu Glu Lys Thr Tyr Ser Ala Lys Leu Asp
 260 265 270
 Asn Ala Arg Gln Ser Ala Glu Arg Asn Ser Asn Leu Val Gly Ala Ala
 275 280 285
 His Glu Glu Leu Gln Gln Ser Arg Ile Arg Ile Asp Ser Leu Ser Ala
 290 295 300
 Gln Leu Ser Gln Leu Gln Lys Gln Leu Ala Ala Lys Glu Ala Lys Leu
 305 310 315 320
 Arg Asp Leu Glu Asp Ser Leu Ala Arg Glu Arg Asp Thr Ser Arg Arg
 325 330 335
 Leu Leu Ala Glu Lys Glu Arg Glu Met Ala Glu Met Arg Ala Arg Met
 340 345 350
 Gln Gln Gln Leu Asp Glu Tyr Gln Glu Leu Leu Asp Ile Lys Leu Ala
 355 360 365
 Leu Asp Met Glu Ile His Ala Tyr Arg Lys Leu Leu Glu Gly Glu Glu
 370 375 380
 Glu Arg Leu Arg Leu Ser Pro Ser Pro Thr Ser Gln Arg Ser Arg Gly
 385 390 395 400
 Arg Ala Ser Ser His Ser Ser Gln Thr Gln Gly Gly Ser Val Thr
 405 410 415
 Lys Lys Arg Lys Leu Glu Ser Thr Glu Ser Arg Ser Ser Phe Ser Gln
 420 425 430
 His Ala Arg Thr Ser Gly Arg Val Ala Val Glu Glu Val Asp Glu Glu
 435 440 445
 Gly Lys Phe Val Arg Leu Arg Asn Lys Ser Asn Glu Asp Gln Ser Met
 450 455 460
 Gly Asn Trp Gln Ile Lys Arg Gln Asn Gly Asp Asp Pro Leu Leu Thr
 465 470 475 480
 Tyr Arg Phe Pro Pro Lys Phe Thr Leu Lys Ala Gly Gln Val Val Thr
 485 490 495
 Ile Trp Ala Ala Gly Ala Gly Ala Thr His Ser Pro Pro Thr Asp Leu
 500 505 510
 Val Trp Lys Ala Gln Asn Thr Trp Gly Cys Gly Asn Ser Leu Arg Thr

515 520 525
 Ala Leu Ile Asn Ser Thr Gly Glu Glu Val Ala Met Arg Lys Leu Val
 530 535 540
 Arg Ser Val Thr Val Val Glu Asp Asp Glu Asp Glu Asp Gly Asp Asp
 545 550 555 560
 Leu Leu His His His His Val Ser Gly Ser Arg Arg
 565 570

<210> 153
 <211> 1610
 <212> DNA
 <213> Homo Sapiens

<400> 153
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 cgggcctttg tgaatatgtg taagcaggat ccgagcggtc tgtacaccga ggaaatgcgc 180
 ttcttgaggg agtgggtgga gagcataggt ggtaaagtac cacctgctac tcagaaagct 240
 atatcagaag aaaataccaa ggaagaaaaa cctgatagta agaaggtgga ggaagactta 300
 aaggcagacg aaccatcaag tgaggaaagt gatctagaaa ttgataaaga aggtgtgatt 360
 gaaccagaca ctgatgctcc tcaagaaatg ggagatgaaa atgcggagat aacggaggag 420
 atgatggatc aggc aaatga taaaaaagt gctgctattg aagccctaaa tgatggtgaa 480
 ctccagaaag ccattgactt attcacagat gccatcaagc tgaatcctcg cttggccatt 540
 ttgtatgcca agagggccag tgtcttcgtc aaattacaga agccaaatgc tgccatccga 600
 gactgtgaca gagccattga aataaatcct gattcagctc agccttacia gtggcggggg 660
 aaagcacaca gacttctagg ccactgggaa gaagcagccc atgatcttgc ccttgccctgt 720
 aaattggatt atgatgaaga tgctagtgcg atgctgaaag aagttcaacc tagggcacag 780
 aaaattgcag aacatcggag aaagtatgag cgaaaacgtg aagagcgaga gatcaaagaa 840
 agaatagaac gagttaagaa ggctcgagaa gagcatgaga gagcccagag ggaggaagaa 900
 gccagacgac agtcaggagc tcagtatggc tcttttccag gtggccttcc tgggggaatg 960
 cctggtaatt ttcccgaggg aatgcctgga atgggagggg gcatgcctgg aatggctgga 1020
 atgectggac tcaatgaaat tcttagtgat ccagaggttc ttgcagccat gcaggatcca 1080
 gaagttatgg tggttttcca ggatgtggct cagaaccagc caaatatgtc aaaataccag 1140
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 taatgtcctt ctgataaata aagcccttgc tgaaggaaaa gcaacctaga tcaccttatg 1260
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 ccattagggg attcattcag ataattgttt cctactagga attacaaact ttaaacactt 1440
 tttaaatctt aaaaatattt aaaacaaatt taaagggcct gtttaattctt atatttttct 1500
 ttactaatca ttttggtatt ttttctttga attattggca gggaatatac ttatgtatgg 1560
 aagattactg ctctgagtga aataaaaagt attagtgcga ggcaaacata 1610

<210> 154
 <211> 369
 <212> PRT
 <213> Homo Sapiens

<400> 154
 Met Asp Pro Arg Lys Val Asn Glu Leu Arg Ala Phe Val Lys Met Cys
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 Lys Gln Asp Pro Ser Val Leu Tyr Thr Glu Glu Met Arg Phe Leu Arg
 20 25 30
 Glu Trp Val Glu Ser Ile Gly Gly Lys Val Pro Pro Ala Thr Gln Lys
 35 40 45
 Ala Ile Ser Glu Glu Asn Thr Lys Glu Glu Lys Pro Asp Ser Lys Lys

50 55 60
 Val Glu Glu Asp Leu Lys Ala Asp Glu Pro Ser Ser Glu Glu Ser Asp
 65 70 75 80
 Leu Glu Ile Asp Lys Glu Gly Val Ile Glu Pro Asp Thr Asp Ala Pro
 85 90 95
 Gln Glu Met Gly Asp Glu Asn Ala Glu Ile Thr Glu Glu Met Met Asp
 100 105 110
 Gln Ala Asn Asp Lys Lys Val Ala Ala Ile Glu Ala Leu Asn Asp Gly
 115 120 125
 Glu Leu Gln Lys Ala Ile Asp Leu Phe Thr Asp Ala Ile Lys Leu Asn
 130 135 140
 Pro Arg Leu Ala Ile Leu Tyr Ala Lys Arg Ala Ser Val Phe Val Lys
 145 150 155 160
 Leu Gln Lys Pro Asn Ala Ala Ile Arg Asp Cys Asp Arg Ala Ile Glu
 165 170 175
 Ile Asn Pro Asp Ser Ala Gln Pro Tyr Lys Trp Arg Gly Lys Ala His
 180 185 190
 Arg Leu Leu Gly His Trp Glu Glu Ala Ala His Asp Leu Ala Leu Ala
 195 200 205
 Cys Lys Leu Asp Tyr Asp Glu Asp Ala Ser Ala Met Leu Lys Glu Val
 210 215 220
 Gln Pro Arg Ala Gln Lys Ile Ala Glu His Arg Arg Lys Tyr Glu Arg
 225 230 235 240
 Lys Arg Glu Glu Arg Glu Ile Lys Glu Arg Ile Glu Arg Val Lys Lys
 245 250 255
 Ala Arg Glu Glu His Glu Arg Ala Gln Arg Glu Glu Glu Ala Arg Arg
 260 265 270
 Gln Ser Gly Ala Gln Tyr Gly Ser Phe Pro Gly Gly Phe Pro Gly Gly
 275 280 285
 Met Pro Gly Asn Phe Pro Gly Gly Met Pro Gly Met Gly Gly Gly Met
 290 295 300
 Pro Gly Met Ala Gly Met Pro Gly Leu Asn Glu Ile Leu Ser Asp Pro
 305 310 315 320
 Glu Val Leu Ala Ala Met Gln Asp Pro Glu Val Met Val Ala Phe Gln
 325 330 335
 Asp Val Ala Gln Asn Pro Ala Asn Met Ser Lys Tyr Gln Ser Asn Pro
 340 345 350
 Lys Val Met Asn Leu Ile Ser Lys Leu Ser Ala Lys Phe Gly Gly Gln
 355 360 365
 Ala

<210> 155
 <211> 1323
 <212> DNA
 <213> Homo Sapiens

<400> 155
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 aatcagttgg atatttcatt cattggtata catatggact gtaagggtgc ttccaggttg 120
 cagaaaagat ggaaaaaagg acatgtgcac tctgccccaa agatgtcgaa tataatgtcc 180
 tgtactttgc acaatcagag aatatagctg ctcatgagaa ttgtttgctg tattcttcag 240
 gacttggtgga atgtgaggat caggatccac ttaatcctga tagaagtttt gatgtggaat 300
 cagtaaagaa agaaatccag agaggaagga agttgaaatg caaattttgt cataaaagag 360
 gagccaccgt gggatgtgat ttaaaaaact gtaacaagaa ttaccacttt ttctgtgcc 420

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agaaggacga cgcagttcca cagtctgatg gagttcgagg aatttataaa ctgctttgcc      480
agcaacatgc tcaattcccc atcatcgctc aaagtgctaa attttcagga gtgaaaagaa      540
aaagaggaag gaagaaaccc ctctcaggca atcatgtaca gccacccgaa acaatgaaat      600
gtaatacatt cataagacaa gtgaaagaag agcatggcag acacacagat gcaactgtga      660
aagttccttt tottaagaaa tgcaagggaa gcaggacttc ttaattactt acttgaagaa      720
atattagnca aagttcattc aattccagaa aaactcatgg atgagactta cttcagaatc      780
agactatgaa gaaatcggga gtgcactttt tgactgtaga ttgttcgaag acacatttgt      840
aaattttcaa gcagcaatag agaaaaaaat tcatgcatct caacaaaggt ggcagcagtt      900
gaaggaagag attgagctac ttcaggactt aaaacaaacc ttgtgctctt ttcaagaaaa      960
tagagatctt atgtcaagtt ctacatcaat atcatccctg tcttattagg gattaccatt     1020
tcctaagcca agagtcatgt caaattgcaa tcaggctcaa aaccagagac caggctgtga     1080
aatccacaca tctttagaac tagtcgtctc ctcttggcct cagcagctct tccctgttct     1140
tactggttga cattttgatc actctttgca cactcttgtg ttttttgctc actgtcacac     1200
tcccagcacc tagtatgctc agtaaagtgt tgtggaataa gtgcataaaa tgttcttaac     1260
ctttgattct acttacagcc catgatagcc tcttagatat aataaatttg gattatacta     1320
aaa                                                                    1323

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<210> 156

<211> 191

<212> PRT

<213> Homo Sapiens

<400> 156

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Met Glu Lys Arg Thr Cys Ala Leu Cys Pro Lys Asp Val Glu Tyr Asn
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Val Leu Tyr Phe Ala Gln Ser Glu Asn Ile Ala Ala His Glu Asn Cys
          20          25          30
Leu Leu Tyr Ser Ser Gly Leu Val Glu Cys Glu Asp Gln Asp Pro Leu
          35          40          45
Asn Pro Asp Arg Ser Phe Asp Val Glu Ser Val Lys Lys Glu Ile Gln
          50          55          60
Arg Gly Arg Lys Leu Lys Cys Lys Phe Cys His Lys Arg Gly Ala Thr
65          70          75          80
Val Gly Cys Asp Leu Lys Asn Cys Asn Lys Asn Tyr His Phe Phe Cys
          85          90          95
Ala Lys Lys Asp Asp Ala Val Pro Gln Ser Asp Gly Val Arg Gly Ile
          100          105          110
Tyr Lys Leu Leu Cys Gln Gln His Ala Gln Phe Pro Ile Ile Ala Gln
          115          120          125
Ser Ala Lys Phe Ser Gly Val Lys Arg Lys Arg Gly Arg Lys Lys Pro
          130          135          140
Leu Ser Gly Asn His Val Gln Pro Pro Glu Thr Met Lys Cys Asn Thr
145          150          155          160
Phe Ile Arg Gln Val Lys Glu Glu His Gly Arg His Thr Asp Ala Thr
          165          170          175
Val Lys Val Pro Phe Leu Lys Lys Cys Lys Gly Ser Arg Thr Ser
          180          185          190

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<210> 157

<211> 4065

<212> DNA

<213> Homo Sapiens

<400> 157

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<210> 158
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 <212> PRT
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<400> 158

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Gly Leu Asp Ala Leu Val Tyr Asp Leu Asp Phe Pro Ala Leu Arg Lys
35          40          45
Asn Lys Asn Ile Asp Asn Phe Leu Ser Arg Tyr Lys Asp Thr Ile Asn
50          55          60
Lys Ile Arg Asp Leu Arg Met Lys Ala Glu Asp Tyr Glu Val Val Lys
65          70          75          80
Val Ile Gly Arg Gly Ala Phe Gly Glu Val Gln Leu Val Arg His Lys
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Ser Thr Arg Lys Val Tyr Ala Met Lys Leu Leu Ser Lys Phe Glu Met
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Ile Lys Arg Ser Asp Ser Ala Phe Phe Trp Glu Glu Arg Asp Ile Met
115         120         125
Ala Phe Ala Asn Ser Pro Trp Val Val Gln Leu Phe Tyr Ala Phe Gln
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145         150         155         160
Leu Val Asn Leu Met Ser Asn Tyr Asp Val Pro Glu Lys Trp Ala Arg
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Phe Tyr Thr Ala Glu Val Val Leu Ala Leu Asp Ala Ile His Ser Met
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Gly Phe Ile His Arg Asp Val Lys Pro Asp Asn Met Leu Leu Asp Lys
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Ser Gly His Leu Lys Leu Ala Asp Phe Gly Thr Cys Met Lys Met Asn
210         215         220
Lys Glu Gly Met Val Arg Cys Asp Thr Ala Val Gly Thr Pro Asp Tyr
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Val Gly Asp Thr Pro Phe Tyr Ala Asp Ser Leu Val Gly Thr Tyr Ser
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5.

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Val	Lys	Asn	Leu	Thr	Leu	Gln	Leu	Glu	Gln	Glu	Ser	Asn	Lys	Arg	Leu			
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Lys	Gly	Leu	Glu	Lys	Gln	Met	Lys	Gln	Glu	Ile	Asn	Thr	Leu	Leu	Glu			
				805				810					815					
Ala	Lys	Arg	Leu	Leu	Glu	Phe	Glu	Leu	Ala	Gln	Leu	Thr	Lys	Gln	Tyr			
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Arg	Gly	Asn	Glu	Gly	Gln	Met	Arg	Glu	Leu	Gln	Asp	Gln	Leu	Glu	Ala			
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Glu	Gln	Tyr	Phe	Ser	Thr	Leu	Tyr	Lys	Thr	Gln	Val	Lys	Glu	Leu	Lys			
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Tyr	Phe	Glu	Leu	Thr	Gln	Glu	Ser	Lys	Lys	Ala	Ala	Ser	Arg	Asn	Arg			
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Gln	Glu	Ile	Thr	Asp	Lys	Asp	His	Thr	Val	Ser	Arg	Leu	Glu	Glu	Ala			
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Lys	Glu	Glu	Glu	Ile	Ser	Asn	Leu	Lys	Ala	Ala	Phe	Glu	Lys	Asn	Ile			
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Asn	Thr	Glu	Arg	Thr	Leu	Lys	Thr	Gln	Ala	Val	Asn	Lys	Leu	Ala	Glu			
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Leu	Asn	Gln	Glu	Arg	Glu	Lys	Phe	Asn	Gln	Met	Val	Val	Lys	His	Gln			
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 Gln Ala Glu Lys Thr Asn Phe Gln Asn His Lys Gly His Glu Phe Ile
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 1235 1240 1245
 Leu Trp His Val Phe Lys Pro Pro Pro Ala Leu Glu Cys Arg Arg Cys
 1250 1255 1260
 His Val Lys Cys His Arg Asp His Leu Asp Lys Lys Glu Asp Leu Ile
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 Cys Pro Cys Lys Val Ser Tyr Asp Val Thr Ser Ala Arg Asp Met Leu
 1285 1290 1295
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 <212> DNA
 <213> Homo Sapiens

<400> 159

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 <213> Homo Sapiens

<400> 160

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Val	Ser	Ala	Tyr	Asp	Gln	Leu	Lys	Ala	Pro	Ala	Ser	Pro	Gly	Ala	Gly

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 Pro Gly Ser Ile Ile Gly Ala Lys Ala Gly Lys Asn Ser Gly Lys Lys
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 Lys Gly Leu Asn Asn Glu Leu Asn Asn Leu Pro Val Ile Ser Asn Met
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 Thr Ala Ala Leu Asp Ser Cys Ser Ala Ala Asp Gly Ser Leu Ala Ala
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 Glu Met Pro Lys Leu Glu Ala Glu Gly Leu Ile Asp Lys Lys Asn Leu
 115 120 125
 Gly Asp Lys Glu Lys Gly Lys Lys Ala Asn Asn Cys Lys Thr Asp Lys
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 <212> PRT
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 Asp Glu Cys Ala Tyr His His Pro Ile Ser Pro Cys Lys Ala Phe Pro
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 Asn Cys Lys Phe Ala Glu Lys Cys Leu Phe Val His Pro Asn Cys Lys
 65 70 75 80
 Tyr Asp Ala Lys Cys Thr Lys Pro Asp Cys Pro Phe Thr His Val Ser
 85 90 95
 Arg Arg Ile Pro Val Leu Ser Pro Lys Pro Val Ala Pro Pro Ala Pro
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 Pro Ser Ser Ser Gln Leu Cys Arg Tyr Phe Pro Ala Cys Lys Lys Met
 115 120 125
 Glu Cys Pro Phe Tyr His Pro Lys His Cys Arg Phe Asn Thr Gln Cys
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<210> 163

<211> 2912

<212> DNA

<213> Homo Sapiens

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<210> 164

<211> 732

<212> PRT

<213> Homo Sapiens

<400> 164

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20      25      30
Ile Ile Asn Thr Phe Tyr Ser Asn Lys Glu Ile Phe Leu Arg Glu Leu
35      40      45
Ile Ser Asn Ser Ser Asp Ala Leu Asp Lys Ile Arg Tyr Glu Thr Leu
50      55      60
Thr Asp Pro Ser Lys Leu Asp Ser Gly Lys Glu Leu His Ile Asn Leu
65      70      75      80
Ile Pro Asn Lys Gln Asp Arg Thr Leu Thr Ile Val Asp Thr Gly Ile
85      90      95
Gly Met Thr Lys Ala Asp Leu Ile Asn Asn Leu Gly Thr Ile Ala Lys
100     105     110
Ser Gly Thr Lys Ala Phe Met Glu Ala Leu Gln Ala Gly Ala Asp Ile
115     120     125
Ser Met Ile Gly Gln Phe Gly Val Gly Phe Tyr Ser Ala Tyr Leu Val
130     135     140
Ala Glu Lys Val Thr Val Ile Thr Lys His Asn Asp Asp Glu Gln Tyr
145     150     155     160
Ala Trp Glu Ser Ser Ala Gly Gly Ser Phe Thr Val Arg Thr Asp Thr
165     170     175
Gly Glu Pro Met Gly Arg Gly Thr Lys Val Ile Leu His Leu Lys Glu
180     185     190
Asp Gln Thr Glu Tyr Leu Glu Glu Arg Arg Ile Lys Glu Ile Val Lys
195     200     205
Lys His Ser Gln Phe Ile Gly Tyr Pro Ile Thr Leu Phe Val Glu Lys
210     215     220
Glu Arg Asp Lys Glu Val Ser Asp Asp Glu Ala Glu Glu Lys Glu Asp

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Lys Glu Glu Glu Lys	Glu Lys Glu Glu Lys	Glu Ser Glu Asp Lys	Pro			
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Glu Ile Glu Asp Val	Gly Ser Asp Glu Glu Glu Glu Lys Lys Asp Gly					
	260		265		270	
Asp Lys Lys Lys Lys	Lys Lys Lys Ile Lys Glu Lys Tyr Ile Asp Gln Glu					
	275		280		285	
Glu Leu Asn Lys Thr	Lys Pro Ile Trp Thr Arg Asn Pro Asp Asp Ile					
	290		295		300	
Thr Asn Glu Glu Tyr	Gly Glu Phe Tyr Lys Ser Leu Thr Asn Asp Trp					
305	310		315		320	
Glu Asp His Leu Ala	Val Lys His Phe Ser Val Glu Gly Gln Leu Glu					
	325		330		335	
Phe Arg Ala Leu Leu	Phe Val Pro Arg Arg Ala Pro Phe Asp Leu Phe					
	340		345		350	
Glu Asn Arg Lys Lys	Lys Asn Asn Ile Lys Leu Tyr Val Arg Arg Val					
	355		360		365	
Phe Ile Met Asp Asn	Cys Glu Leu Ile Pro Glu Tyr Leu Asn Phe					
	370		375		380	
Ile Arg Gly Val Val	Asp Ser Glu Asp Leu Pro Leu Asn Ile Ser Arg					
385	390		395		400	
Glu Met Leu Gln Gln	Ser Lys Ile Leu Lys Val Ile Arg Lys Asn Leu					
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Val Lys Lys Cys Leu	Glu Leu Phe Thr Glu Leu Ala Glu Asp Lys Glu					
	420		425		430	
Asn Tyr Lys Lys Phe	Tyr Glu Gln Phe Ser Lys Asn Ile Lys Leu Gly					
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Ile His Glu Asp Ser	Gln Asn Arg Lys Lys Leu Ser Glu Leu Leu Arg					
	450		455		460	
Tyr Tyr Thr Ser Ala	Ser Gly Asp Glu Met Val Ser Leu Lys Asp Tyr					
465	470		475		480	
Cys Thr Arg Met Lys	Glu Asn Gln Lys His Ile Tyr Tyr Ile Thr Gly					
	485		490		495	
Glu Thr Lys Asp Gln	Val Ala Asn Ser Ala Phe Val Glu Arg Leu Arg					
	500		505		510	
Lys His Gly Leu Glu	Val Ile Tyr Met Ile Glu Pro Ile Asp Glu Tyr					
	515		520		525	
Cys Val Gln Gln Leu	Lys Glu Phe Glu Gly Lys Thr Leu Val Ser Val					
	530		535		540	
Thr Lys Glu Gly Leu	Glu Leu Pro Glu Asp Glu Glu Lys Lys Lys					
545	550		555		560	
Gln Glu Glu Lys Lys	Thr Lys Phe Glu Asn Leu Cys Lys Ile Met Lys					
	565		570		575	
Asp Ile Leu Glu Lys	Lys Val Glu Lys Val Val Val Ser Asn Arg Leu					
	580		585		590	
Val Thr Ser Pro Cys	Cys Ile Val Thr Ser Thr Tyr Gly Trp Thr Ala					
	595		600		605	
Asn Met Glu Arg Ile	Met Lys Ala Gln Ala Leu Arg Asp Asn Ser Thr					
	610		615		620	
Met Gly Tyr Met Ala	Ala Lys Lys His Leu Glu Ile Asn Pro Asp His					
625	630		635		640	
Ser Ile Ile Glu Thr	Leu Arg Gln Lys Ala Glu Ala Asp Lys Asn Asp					
	645		650		655	
Lys Ser Val Lys Asp	Leu Val Ile Leu Leu Tyr Glu Thr Ala Leu Leu					
	660		665		670	

Ser Ser Gly Phe Ser Leu Glu Asp Pro Gln Thr His Ala Asn Arg Ile
675 680 685
Tyr Arg Met Ile Lys Leu Gly Leu Gly Ile Asp Glu Asp Asp Pro Thr
690 695 700
Ala Asp Asp Thr Ser Ala Ala Val Thr Glu Glu Met Pro Pro Leu Glu
705 710 715 720
Gly Asp Asp Asp Thr Ser Arg Met Glu Glu Val Asp
725 730

<210> 165
<211> 790
<212> DNA
<213> Homo Sapiens

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aatacatgag tatggaatta ttgcaagaag ctgggtgtctc cgttcccaaa ggatatgtgg 240
caaagtcacc agatgaagct tatgcaattg ccaaaaaatt aggttcaaaa gatgtcgtga 300
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gaggagtga gatagttttc tctccagaag aagcaaaagc tgtttcttca caaatgattg 420
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tctgtgagcg aaaatatccc aggagagaat actactttgc aataacaatg gaaaggatcat 540
ttcaaggtcc tgtattaata ggaagttcac atggtggtgt caacattgaa gatgttctgtg 600
ctgagtctcc tgaagcaata attaaagaac ctattgatat tgaagaaggc atcaaaaagg 660
aacaagctct tcagcttgca cagaagaatg ggatttcccc taatattgng ggaatcagca 720
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<210> 166
<211> 259
<212> PRT
<213> Homo Sapiens

<400> 166
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Gln Val Leu Gly Ser Ser Gly Leu Phe Asn Asn His Gly Leu Gln Val
35 40 45
Gln Gln Gln Gln Gln Arg Asn Leu Ser Leu His Glu Tyr Met Ser Met
50 55 60
Glu Leu Leu Gln Glu Ala Gly Val Ser Val Pro Lys Gly Tyr Val Ala
65 70 75 80
Lys Ser Pro Asp Glu Ala Tyr Ala Ile Ala Lys Lys Leu Gly Ser Lys
85 90 95
Asp Val Val Ile Lys Ala Gln Val Leu Ala Gly Gly Arg Gly Lys Gly
100 105 110
Thr Phe Glu Ser Gly Leu Lys Gly Gly Val Lys Ile Val Phe Ser Pro
115 120 125
Glu Glu Ala Lys Ala Val Ser Ser Gln Met Ile Gly Lys Lys Leu Phe
130 135 140
Thr Lys Gln Thr Gly Glu Lys Gly Arg Ile Cys Asn Gln Val Leu Val

145 150 155 160
 Cys Glu Arg Lys Tyr Pro Arg Arg Glu Tyr Tyr Phe Ala Ile Thr Met
 165 170 175
 Glu Arg Ser Phe Gln Gly Pro Val Leu Ile Gly Ser Ser His Gly Gly
 180 185 190
 Val Asn Ile Glu Asp Val Ala Ala Glu Ser Pro Glu Ala Ile Ile Lys
 195 200 205
 Glu Pro Ile Asp Ile Glu Glu Gly Ile Lys Lys Glu Gln Ala Leu Gln
 210 215 220
 Leu Ala Gln Lys Asn Gly Ile Ser Pro Asn Ile Gly Ile Ser Ser Arg
 225 230 235 240
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 245 250 255
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<210> 167

<211> 5307

<212> DNA

<213> Homo Sapiens

<400> 167

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5307

<210> 168
 <211> 1148
 <212> PRT
 <213> Homo Sapiens

<400> 168
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 Ala Pro Gly Asn Ser Asn Pro Ser Leu Ser Val Pro Ser Ser Ala Glu
 35 40 45
 Ser Glu Lys Gln Thr Arg Gln Ala Pro Lys Arg Lys Ser Val Arg Arg
 50 55 60
 Gly Arg Lys Pro Pro Leu Leu Lys Lys Lys Leu Arg Ser Ser Val Ala
 65 70 75 80
 Ala Pro Glu Lys Ser Ser Ser Asn Asp Ser Val Asp Glu Glu Thr Ala
 85 90 95
 Glu Ser Asp Thr Ser Pro Val Leu Glu Lys Glu His Gln Pro Asp Val
 100 105 110
 Asp Ser Ser Asn Ile Cys Thr Val Gln Thr His Val Glu Asn Gln Ser
 115 120 125
 Ala Asn Cys Leu Lys Ser Cys Asn Glu Gln Ile Glu Glu Ser Glu Lys
 130 135 140
 His Thr Ala Asn Tyr Asp Thr Glu Glu Arg Val Gly Ser Ser Ser Ser
 145 150 155 160
 Glu Ser Cys Ala Gln Asp Leu Pro Val Leu Val Gly Glu Glu Gly Glu
 165 170 175
 Val Lys Lys Leu Glu Asn Thr Gly Ile Glu Ala Asn Val Leu Cys Leu
 180 185 190
 Glu Ser Glu Ile Ser Glu Asn Ile Leu Glu Lys Gly Gly Asp Pro Leu
 195 200 205
 Glu Lys Gln Asp Gln Ile Ser Gly Leu Ser Gln Ser Glu Val Lys Thr
 210 215 220
 Asp Val Cys Thr Val His Leu Pro Asn Asp Phe Pro Thr Cys Leu Thr
 225 230 235 240
 Ser Glu Ser Lys Val Tyr Gln Pro Val Ser Cys Pro Leu Ser Asp Leu
 245 250 255
 Ser Glu Asn Val Glu Ser Val Val Asn Glu Glu Lys Ile Thr Glu Ser
 260 265 270
 Ser Leu Val Glu Ile Thr Glu His Lys Asp Phe Thr Leu Lys Thr Glu
 275 280 285
 Glu Leu Ile Glu Ser Pro Lys Leu Glu Ser Ser Glu Gly Glu Ile Ile
 290 295 300
 Gln Thr Val Asp Arg Gln Ser Val Lys Ser Pro Glu Val Gln Leu Leu
 305 310 315 320
 Gly His Val Glu Thr Glu Asp Val Glu Ile Ile Ala Thr Cys Asp Thr
 325 330 335
 Phe Gly Asn Glu Asp Phe Asn Asn Ile Gln Asp Ser Glu Asn Asn Leu
 340 345 350
 Leu Lys Asn Asn Leu Leu Asn Thr Lys Leu Glu Lys Ser Leu Glu Glu

355 360 365
 Lys Asn Glu Ser Leu Thr Glu His Pro Arg Ser Thr Glu Leu Pro Lys
 370 375 380
 Thr His Ile Glu Gln Ile Gln Lys His Phe Ser Glu Asp Asn Asn Glu
 385 390 395 400
 Met Ile Pro Met Glu Cys Asp Ser Phe Cys Ser Asp Gln Asn Glu Ser
 405 410 415
 Glu Val Glu Pro Ser Val Asn Ala Asp Leu Lys Gln Met Asn Glu Asn
 420 425 430
 Ser Val Thr His Cys Ser Glu Asn Asn Met Pro Ser Ser Asp Leu Ala
 435 440 445
 Asp Glu Lys Val Glu Thr Val Ser Gln Pro Ser Glu Ser Pro Lys Asp
 450 455 460
 Thr Ile Asp Lys Thr Lys Lys Pro Arg Thr Arg Arg Ser Arg Phe His
 465 470 475 480
 Ser Pro Ser Thr Thr Trp Ser Pro Asn Lys Asp Thr Pro Gln Glu Lys
 485 490 495
 Lys Arg Pro Gln Ser Pro Ser Pro Arg Arg Glu Thr Gly Lys Glu Ser
 500 505 510
 Arg Lys Ser Gln Ser Pro Ser Pro Lys Asn Glu Ser Ala Arg Gly Arg
 515 520 525
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 545 550 555 560
 Arg Arg Ser Glu Ser Leu Ser Pro Arg Arg Glu Thr Ser Arg Glu Asn
 565 570 575
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 610 615 620
 Arg Ser Pro Ser Arg Cys Arg Thr Lys Ser Lys Ser Ser Ser Phe Gly
 625 630 635 640
 Arg Ile Asp Arg Asp Ser Tyr Ser Pro Arg Trp Lys Gly Arg Trp Ala
 645 650 655
 Asn Asp Gly Trp Arg Cys Pro Arg Gly Asn Asp Arg Tyr Arg Lys Asn
 660 665 670
 Asp Pro Glu Lys Gln Asn Glu Asn Thr Arg Lys Glu Lys Asn Asp Ile
 675 680 685
 His Leu Asp Ala Asp Asp Pro Asn Ser Ala Asp Lys His Arg Asn Asp
 690 695 700
 Cys Pro Asn Trp Ile Thr Glu Lys Ile Asn Ser Gly Pro Asp Pro Arg
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 Thr Arg Asn Pro Glu Lys Leu Lys Glu Ser His Trp Glu Glu Asn Arg
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 Asn Glu Asn Ser Gly Asn Ser Trp Asn Lys Asn Phe Gly Ser Gly Trp
 740 745 750
 Val Ser Asn Arg Gly Arg Gly Arg Gly Asn Arg Gly Arg Gly Thr Tyr
 755 760 765
 Arg Ser Ser Phe Ala Tyr Lys Asp Gln Asn Glu Asn Arg Trp Gln Asn
 770 775 780
 Arg Lys Pro Leu Ser Gly Asn Ser Asn Ser Ser Gly Ser Glu Ser Phe
 785 790 795 800

Lys Phe Val Glu Gln Gln Ser Tyr Lys Arg Lys Ser Glu Gln Glu Phe
 805 810 815
 Ser Phe Asp Thr Pro Ala Asp Arg Ser Gly Trp Thr Ser Ala Ser Ser
 820 825 830
 Trp Ala Val Arg Lys Thr Leu Pro Ala Asp Val Gln Asn Tyr Tyr Ser
 835 840 845
 Arg Arg Gly Arg Asn Ser Ser Gly Pro Gln Ser Gly Trp Met Lys Gln
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 Ile Phe Pro Tyr Pro Val Gly Val His Ala Pro Leu Met Asn Ile Gln
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 Arg Asn Pro Phe Asn Ile His Pro Gln Leu Pro Leu His Leu His Thr
 930 935 940
 Gly Val Pro Leu Met Gln Val Ala Thr Pro Thr Ser Val Ser Gln Gly
 945 950 955 960
 Leu Pro Pro Pro Pro Pro Pro Pro Pro Pro Ser Gln Gln Val Asn Tyr
 965 970 975
 Ile Ala Ser Gln Pro Asp Gly Lys Gln Leu Gln Gly Ile Pro Ser Ser
 980 985 990
 Ser His Val Ser Asn Asn Met Ser Thr Pro Val Leu Pro Ala Pro Thr
 995 1000 1005
 Ala Ala Pro Gly Asn Thr Gly Met Val Gln Gly Pro Ser Ser Gly Asn
 1010 1015 1020
 Thr Ser Ser Ser Ser His Ser Lys Ala Ser Asn Ala Ala Val Lys Leu
 1025 1030 1035 104
 Ala Glu Ser Lys Val Ser Val Ala Val Glu Ala Ser Ala Asp Ser Ser
 1045 1050 1055
 Lys Thr Asp Lys Lys Leu Gln Ile Gln Glu Lys Ala Ala Gln Glu Val
 1060 1065 1070
 Lys Leu Ala Ile Lys Pro Phe Tyr Gln Asn Lys Asp Ile Thr Lys Glu
 1075 1080 1085
 Glu Tyr Lys Glu Ile Val Arg Lys Ala Val Asp Lys Val Cys His Ser
 1090 1095 1100
 Lys Ser Gly Glu Val Asn Ser Thr Lys Val Ala Asn Leu Val Lys Ala
 1105 1110 1115 112
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 1125 1130 1135
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 1140 1145

<210> 169

<211> 597

<212> DNA

<213> Homo Sapiens

<400> 169

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acttggatca agttccctcc cctctcctca aaatatatcg acttgtgctg aaagaaatca	240

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gcaaacaagg	gacaggccct	caaagttgtc	ggtagggagc	caggaccccc	ccagtggcgt	420
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aagggctggc	taagggaggg	cggggcggag	gaagccaagc	tctgcaggcc	ctgacaaagt	540
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<210> 170

<211> 3344

<212> DNA

<213> Homo Sapiens

<400> 170

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tcaggaaagc	agagagcttg	aagaaatgtc	tctctgtcat	ggaagccaaa	gtgaaggctc	2460
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<210> 171

<211> 1004

<212> PRT

<213> Homo Sapiens

<400> 171

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Val Thr Phe Lys Met Asp Ser Thr Leu Thr Ala Ser Glu Ile Arg Gln
35          40          45
Arg Phe Ile Asp Phe Phe Lys Arg Asn Glu His Thr Tyr Val His Ser
50          55          60
Ser Ala Thr Ile Pro Leu Asp Asp Pro Thr Leu Leu Phe Ala Asn Ala
65          70          75          80
Gly Met Asn Gln Phe Lys Pro Ile Phe Leu Asn Thr Ile Asp Pro Ser
85          90          95
His Pro Met Ala Lys Leu Ser Arg Ala Ala Asn Thr Gln Lys Cys Ile
100          105          110
Arg Ala Gly Lys Gln Asn Asp Leu Asp Asp Val Gly Lys Asp Val
115          120          125
Tyr His His Thr Phe Phe Glu Met Leu Gly Ser Trp Ser Phe Gly Asp
130          135          140
Tyr Phe Lys Glu Leu Ala Cys Lys Met Ala Leu Glu Leu Leu Thr Gln
145          150          155          160
Glu Phe Gly Ile Pro Ile Glu Arg Leu Tyr Val Thr Tyr Phe Gly Gly
165          170          175
Asp Glu Ala Ala Gly Leu Glu Ala Asp Leu Glu Cys Lys Gln Ile Trp
180          185          190
Gln Asn Leu Gly Leu Asp Asp Thr Lys Ile Leu Pro Gly Asn Met Lys
195          200          205
Asp Asn Phe Trp Glu Met Gly Asp Thr Gly Pro Cys Gly Pro Cys Ser
210          215          220
Glu Ile His Tyr Asp Arg Ile Gly Gly Arg Asp Ala Ala His Leu Val
225          230          235          240
Asn Gln Asp Asp Pro Asn Val Leu Glu Ile Trp Asn Leu Val Phe Ile
245          250          255
Gln Tyr Asn Arg Glu Ala Asp Gly Ile Leu Lys Pro Leu Pro Lys Lys
260          265          270

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Ser Ile Asp Thr Gly Met Gly Leu Glu Arg Leu Val Ser Val Leu Gln
 275 280 285
 Asn Lys Met Ser Asn Tyr Asp Thr Asp Leu Phe Val Pro Tyr Phe Glu
 290 295 300
 Ala Ile Gln Lys Gly Thr Gly Ala Arg Pro Tyr Thr Gly Lys Val Gly
 305 310 315 320
 Ala Glu Asp Ala Asp Gly Ile Asp Met Ala Tyr Arg Val Leu Ala Asp
 325 330 335
 His Ala Arg Thr Ile Thr Val Ala Leu Ala Asp Gly Gly Arg Pro Asp
 340 345 350
 Asn Thr Gly Arg Gly Tyr Val Leu Arg Arg Ile Leu Arg Arg Ala Val
 355 360 365
 Arg Tyr Ala His Glu Lys Leu Asn Ala Ser Arg Gly Phe Phe Ala Thr
 370 375 380
 Leu Val Asp Val Val Val Gln Ser Leu Gly Asp Ala Phe Pro Glu Leu
 385 390 395 400
 Lys Lys Asp Pro Asp Met Val Lys Asp Ile Ile Asn Glu Glu Glu Val
 405 410 415
 Gln Phe Leu Lys Thr Leu Ser Arg Gly Arg Arg Ile Leu Asp Arg Lys
 420 425 430
 Ile Gln Ser Leu Gly Asp Ser Lys Thr Ile Pro Gly Asp Thr Ala Trp
 435 440 445
 Leu Leu Tyr Asp Thr Tyr Gly Phe Pro Val Asp Leu Thr Gly Leu Ile
 450 455 460
 Ala Glu Glu Lys Gly Leu Val Val Asp Met Asp Gly Phe Glu Glu Glu
 465 470 475 480
 Arg Lys Leu Ala Gln Leu Lys Ser Gln Gly Lys Gly Ala Gly Gly Glu
 485 490 495
 Asp Leu Ile Met Leu Asp Ile Tyr Ala Ile Glu Glu Leu Arg Ala Arg
 500 505 510
 Gly Leu Glu Val Thr Asp Asp Ser Pro Lys Tyr Asn Tyr His Leu Asp
 515 520 525
 Ser Ser Gly Ser Tyr Val Phe Glu Asn Thr Val Ala Thr Val Met Ala
 530 535 540
 Leu Arg Arg Glu Lys Met Phe Val Glu Glu Val Ser Thr Gly Gln Glu
 545 550 555 560
 Cys Gly Val Val Leu Asp Lys Thr Cys Phe Tyr Ala Glu Gln Gly Gly
 565 570 575
 Gln Ile Tyr Asp Glu Gly Tyr Leu Val Lys Val Asp Asp Ser Ser Glu
 580 585 590
 Asp Lys Thr Glu Phe Thr Val Lys Asn Ala Gln Val Arg Gly Gly Tyr
 595 600 605
 Val Leu His Ile Gly Thr Ile Tyr Gly Asp Leu Lys Val Gly Asp Gln
 610 615 620
 Val Trp Leu Phe Ile Asp Glu Pro Arg Arg Arg Pro Ile Met Ser Asn
 625 630 635 640
 His Thr Ala Thr His Ile Leu Asn Phe Ala Leu Arg Ser Val Leu Gly
 645 650 655
 Glu Ala Asp Gln Lys Gly Ser Leu Val Ala Pro Asp Arg Leu Arg Phe
 660 665 670
 Asp Phe Thr Ala Lys Gly Ala Met Ser Thr Gln Gln Ile Lys Lys Ala
 675 680 685
 Glu Glu Ile Ala Asn Glu Met Ile Glu Ala Ala Lys Ala Val Tyr Thr
 690 695 700
 Gln Asp Cys Pro Leu Ala Ala Ala Lys Ala Ile Gln Gly Leu Arg Ala

705 710 715 720
 Val Phe Asp Glu Thr Tyr Pro Asp Pro Val Arg Val Val Ser Ile Gly
 725 730 735
 Val Pro Val Ser Glu Leu Leu Asp Asp Pro Ser Gly Pro Ala Gly Ser
 740 745 750
 Leu Thr Ser Val Glu Phe Cys Gly Gly Thr His Leu Arg Asn Ser Ser
 755 760 765
 His Ala Gly Ala Phe Val Ile Val Thr Glu Glu Ala Ile Ala Lys Gly
 770 775 780
 Ile Arg Arg Ile Val Ala Val Thr Gly Ala Glu Ala Gln Lys Ala Leu
 785 790 795 800
 Arg Lys Ala Glu Ser Leu Lys Lys Cys Leu Ser Val Met Glu Ala Lys
 805 810 815
 Val Lys Ala Gln Thr Ala Pro Asn Lys Asp Val Gln Arg Glu Ile Ala
 820 825 830
 Asp Leu Gly Glu Ala Leu Ala Thr Ala Val Ile Pro Gln Trp Gln Lys
 835 840 845
 Asp Glu Leu Arg Glu Thr Leu Lys Ser Leu Lys Lys Val Met Asp Asp
 850 855 860
 Leu Asp Arg Ala Ser Lys Ala Asp Val Gln Lys Arg Val Leu Glu Lys
 865 870 875 880
 Thr Lys Gln Phe Ile Asp Ser Asn Pro Asn Gln Pro Leu Val Ile Leu
 885 890 895
 Glu Met Glu Ser Gly Ala Ser Ala Lys Ala Leu Asn Glu Ala Leu Lys
 900 905 910
 Leu Phe Lys Met His Ser Pro Gln Thr Ser Ala Met Leu Phe Thr Val
 915 920 925
 Asp Asn Glu Ala Gly Lys Ile Thr Cys Leu Cys Gln Val Pro Gln Asn
 930 935 940
 Ala Ala Asn Arg Gly Leu Lys Ala Ser Glu Trp Val Gln Gln Val Ser
 945 950 955 960
 Gly Leu Met Asp Gly Lys Gly Gly Gly Lys Asp Val Ser Ala Gln Ala
 965 970 975
 Thr Gly Lys Asn Val Gly Cys Leu Gln Glu Ala Leu Gln Leu Ala Thr
 980 985 990
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<210> 172

<211> 659

<212> DNA

<213> Homo Sapiens

<400> 172

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tcagatggac cgattggatc gagaagaagc tttctatcaa tttgtaaata acctgagtga    300
agaagattat aggcttatga gagataacaa tttgctaggc accccagggtg aaagtactga    360
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tgaaaataga ggaggagact cttcagatga tgtgtcctaat ggtgactcta taatagactg    480
gcttaactct gtcagacaaa ctggaaatac aacaagaagt gggcaaagag gaaaccaatc    540
ttggagagca gtgagtcgga ctaatccaaa cagtgggtga tttcagattc agtttagaga    600
taaagtgttaa cccgtaataa tgggagccaa aattcagaga atgaaaatga gccatctgc    659

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<210> 173
 <211> 192
 <212> PRT
 <213> Homo Sapiens

<400> 173
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 35 40 45
 Leu Lys Pro Ser Ile Phe His Leu Phe Ile Asn Met Glu Asn Ser Asp
 50 55 60
 Ser Asn Asp Lys Gly Ser Gly Asp Gln Ser Ala Ala Gln Arg Arg Ser
 65 70 75 80
 Gln Met Asp Arg Leu Asp Arg Glu Glu Ala Phe Tyr Gln Phe Val Asn
 85 90 95
 Asn Leu Ser Glu Glu Asp Tyr Arg Leu Met Arg Asp Asn Asn Leu Leu
 100 105 110
 Gly Thr Pro Gly Glu Ser Thr Glu Glu Glu Leu Leu Arg Arg Leu Gln
 115 120 125
 Gln Ile Lys Glu Gly Pro Pro Pro Gln Asn Ser Asp Glu Asn Arg Gly
 130 135 140
 Gly Asp Ser Ser Asp Asp Val Ser Asn Gly Asp Ser Ile Ile Asp Trp
 145 150 155 160
 Leu Asn Ser Val Arg Gln Thr Gly Asn Thr Thr Arg Ser Gly Gln Arg
 165 170 175
 Gly Asn Gln Ser Trp Arg Ala Val Ser Arg Thr Asn Pro Asn Ser Gly
 180 185 190

<210> 174
 <211> 610
 <212> DNA
 <213> Homo Sapiens

<400> 174
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 caacccccaaa tctgccacag agcagtcagg aactggtatc cgatcagaga gtgagacaga 180
 gtccgaggcc tcagaaatta ctattcctcc cagcaccg gcagttccac aggctcccg 240
 ccagggggag gactacggca aaggtgtcat cttctacctc agggacaaag tggctcgtggg 300
 gattgtgcta tggaacatct ttaaccgaat gccaatagca aggaagatca ttaaggacgg 360
 tgagcagcat gaagatctca atgaagtagc caaactattc aacattcatg aagactgaag 420
 cccacacagt gaattggcaa acccaactgca gcccttgaga ggaggtcgaa tgggttaaagg 480
 agcatttttt tattcagcag actttctctg tgtatgagtg tgaatgatca agtcctttgt 540
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 cttctaaaaa 610

<210> 175
 <211> 138
 <212> PRT
 <213> Homo Sapiens

<400> 175

Tyr Trp His Gln Ser Met Phe Trp Ser Asp Leu Gly Pro Asp Val Gly
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 Tyr Glu Ala Ile Gly Leu Val Asp Ser Ser Leu Pro Thr Val Gly Val
 20 25 30
 Phe Ala Lys Ala Thr Ala Gln Asp Asn Pro Lys Ser Ala Thr Glu Gln
 35 40 45
 Ser Gly Thr Gly Ile Arg Ser Glu Ser Glu Thr Glu Ser Glu Ala Ser
 50 55 60
 Glu Ile Thr Ile Pro Pro Ser Thr Pro Ala Val Pro Gln Ala Pro Val
 65 70 75 80
 Gln Gly Glu Asp Tyr Gly Lys Gly Val Ile Phe Tyr Leu Arg Asp Lys
 85 90 95
 Val Val Val Gly Ile Val Leu Trp Asn Ile Phe Asn Arg Met Pro Ile
 100 105 110
 Ala Arg Lys Ile Ile Lys Asp Gly Glu Gln His Glu Asp Leu Asn Glu
 115 120 125
 Val Ala Lys Leu Phe Asn Ile His Glu Asp
 130 135

<210> 176

<211> 805

<212> DNA

<213> Homo Sapiens

<400> 176

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<210> 177

<211> 626

<212> DNA

<213> Homo Sapiens

<400> 177

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caggtttgca ggcaggccgt catgagtgcc ggtggaaggc tccgagggcg tgggcagggg      180
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caggggctcc tccatgggtc cgtagcgctt caccacgcag ccgttcttgt cgatgaggaa      300
ctgtgganan acggtgtcca aactgtgggg ccaccctgc aaggggctga ggctgccctt      360
cctgtccgct gccatctgg gccacggctg tggccagggg aaactgggtc cctaccccccc      420
acagccccct taccttttgt gaagttccac ttgatggcac tggaaaaanaa gcacatggac      480
gtgagcgctc ccaggcagcc cccacagtc cccaaagctt gtcctgtctc caaggaggcc      540

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anaaaggttg ttagcttccc ccggtncctc cacangccac agtgccccc aanncccccc 600
 aanagccatc tttaccccaa ggaggg 626

<210> 178
 <211> 793
 <212> DNA
 <213> Homo Sapiens

<400> 178
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 agggcggtgct ggagaagcgc agcgacgggt tgttgagct ctggaagaaa aagtgttgca 180
 tcctcaccga ggaagggctg ctgcttatcc cgcccaagca gctgcaacac cagcagcagc 240
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 aaccagtggt ccccgctgtc gccagcctcg agccgcccgt caagctcaag gaactgcact 360
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 tgggtgatggc agaggggcaag gagatcgact ttcgggtgcc gcaagaccag ggctggaacg 480
 ccgagatcac gctgcagatg gtgcagtaca agaatcgta ggccatcctg gcggtcaaat 540
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 attcacaac ccgaagcct caagcccca cccaaagccc tcangcccca ngcaagntcc 720
 aaccggttat ncggccatcc aacattcaan atccaanact ctcaangcct taactnccn 780
 acccaanaac nct 793

<210> 179
 <211> 786
 <212> DNA
 <213> Homo Sapiens

<400> 179
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 ctccaagatt aggaattact acggattagg tttttgaaaa taaagtttcc tttttggaaa 180
 atggtctaca ttcagaaatg tcttagaaca agcattttaa aaaaactaat aaataatcat 240
 aaatcaaaat acattaaaat aaaattacag tacatcatcg ctcttagaaa attcaccata 300
 caagcgcagc ctttcaaagg ttcataaata aaagtcttct tgactcgaaa tcgtttcctg 360
 catcgtgatg aaaagtatgc agaaaactaa gaagaatcgc aagttttcag taggggtgatg 420
 tccaaactac ttgatctggt ccggggcgga gagactgttt tgcttttgat ccaagtgaag 480
 acaatagaaa tgtgctcgtc ccacttctc aagtcctcaa aaccttgtct tgcccgggag 540
 ctgccccctt cangcagagt tgggaggtgc tgcgganaaa ccggtgccg tgcggctgcc 600
 aatgcggctg tgggtgtggg tgcngtattt ggtgccggat gcnggtgccg ggtnaagggt 660
 tggggtgcc antnaaggat gaaaatgtgg atntnngnat nttgattccg gatacggggt 720
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 ttgggg 786

<210> 180
 <211> 791
 <212> DNA
 <213> Homo Sapiens

<400> 180
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 cctcatggc ctcttctccg acttctatct gtgtgtgtgg gcaggtgcc gctgggggtg 180
 gagttctgca gtgtgacctg tgtcaggact ggttccatgg gcagtgtgtg tcagtgcccc 240

atctctcac	ctctccaaag	cccagtctca	cttcattctcc	actgctagcc	tgggtgggaat	300
gggacacaaa	attcctgtgt	ccactgtgta	tgcgctcacg	acggccacgc	ctagagacaa	360
tcctagcctt	gctggttgcc	ctgcagaggc	tgcccgtgcg	gctgcctgag	ggtgaggccc	420
ttcagtgtct	cacagagagg	gccattggct	ggcaagaccg	tgccagaaag	gctctggcct	480
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aaggcagtgg	caacaatatt	tcnaangtcc	aagggtctgt	ggagaatgga	gacantgttg	660
accagtctctg	agaacatggc	tccaggaaag	ggctctgacc	tggagctacn	gtcctcactg	720
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<210> 181

<211> 747

<212> DNA

<213> Homo Sapiens

<400> 181

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acaggtagag	tcatgaaatt	cttgtttttc	cctattcttt	ttggtaatta	caacgtacat	120
tgtcttcttt	tataataaga	cccaagggga	gaaaagaaaa	ggatgtacaa	tgaagggtaca	180
agttttgaag	cacaaaaata	ttttatgaca	gggacaaaaa	aacaaaaaac	aaacaaaaat	240
tgaagtacag	aaagaggggtg	gtgggggcaa	aaataaaggt	acgcacttgg	gcttcctcaa	300
gatttgtttg	tccctattca	gactagaatg	aaactggttt	aggaaatcac	tcctgtatgc	360
tagcaggaat	gttgctggca	agacacttct	gagcatcggg	gtgtggactt	tacgaaccaa	420
ccttttaaca	gtaactctag	gagagaggat	atcaaaaatt	ggcagtgaaa	aattatagat	480
aggcaaaaag	ctccttctga	ggtccaggcc	aggagatagt	angatttaag	aaacaaacaa	540
acaataacaa	ccacaaatgg	acctttgggtg	ccactgtcac	aactgttgct	catcagagta	600
ggagaattgt	ancaaaggca	ttaaagaagg	gacaagcaag	ctgaagagcc	tgaatccttg	660
gggttgtaag	ccnatttttg	gnttcctttc	aagaaaaggg	ctgttggnccg	gtggaanggg	720
tcanggaaca	ntattttcacg	ggtcngc				747

<210> 182

<211> 909

<212> DNA

<213> Homo Sapiens

<400> 182

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tgctcaatga	aataaaaagag	gatacaaaaca	aatggaagaa	cattccatgc	tcattgggtag	180
gaagaatcaa	tatcgtgaaa	atggccatac	tgcccaaggt	aatgtataga	ttcaatgcca	240
tccccatcaa	gctaccaatg	actttcttca	cagaattgga	aaaaactact	caaaagttca	300
tatggaacca	aaaaagagcc	cacattgcca	agtcaatcct	aagccaaaag	aacaaagctg	360
gaggcatcac	gctacctgac	ttcaaaactat	actacaaggc	tacagtaacc	aaaacagcgt	420
ggtactggta	ccaaaacaga	gatataaatc	aatgcaacag	aacagagccc	tcagaaataa	480
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aactggatct	cttctttata	ccttatataca	aaattaattg	aagatggntt	aaaggactta	660
aacgtagag	ctaaaacat	aaaaacccta	gaagaaaaac	ctaggcatta	ccattcangg	720
acataggctt	gggcaaggac	ttcctgtcta	aaacaccaan	agcaatggga	ncaaaagcca	780
aaattgcaaa	tggggattct	aattaactaa	agggcttttg	cacagcnaag	aagctccatc	840
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nccagaatc						909

<210> 183

<211> 708
 <212> DNA
 <213> Homo Sapiens

<400> 183
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 tctcctaagt ctatccctcc cgctccccc caccacacaa cagtccccag agtgtgatgt 180
 tccccttctt gtgtccatgt gttctcactg ttcaattccc acctatgagt gagaatatgc 240
 ggtgttttgg ttttttgtcc ttgccatagt ttactgagaa tgatgatttc caatttcac 300
 cctgtcccta caaaggacat gaactcatca ttttttatgg ctgcatagta ttccatgggtg 360
 tatatgtgcc acattttctt aatccagctc atcattgttg gccatttggg ttgggtccaa 420
 gtctttgtca ttgtgaatac tgccgcaata aacatacgtg tgcattgtgc tttatagcag 480
 catgatttat antcctttgg gtatatactc agtaatggga tggctgggtc aaatgggnatt 540
 ccaantccan atcccttang aattgccaca cggactccac aanggttgaa ctantttaca 600
 gtcccancaa cagngtnaaa gggtcnnaan tcncctaaat cctctccaag caccngttgt 660
 tcccggactt ttttaanggat tgncaattcc aaccggngt caaaaagg 708

<210> 184
 <211> 855
 <212> DNA
 <213> Homo Sapiens

<400> 184
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 tggagggttg acctcctaag gcttatgaag ttgcgattaa gatgggtggc gtagggaatct 180
 gtgcgcacaga tgaccacgtg gttagtggca acctggtgac ccccttctt gtgattttag 240
 gccatgaggc agccggcatc gtggagagtg ttggagaagg ggtgactaca gtcaaaccag 300
 gtgataaagt catcccgtc tttactcctc agtgtggaaa atgcagagtt tgtaaaaacc 360
 cggagagcaa ctactgcttg aaaaatgatc taggcaatcc tcgggggacc ctgcaggatg 420
 gcaccaggag gttcacctgc agggggaagc ccattcacca ctctcttggc accagcacct 480
 tctcccagta cacggtgggtg gatgagaatg cagtggccaa aattgatgca gcctcgcccc 540
 tggagaaagt ctgcctcatt ggctgtggat tctcgactgg gttatgggtc tgcagttaac 600
 gttgccaagg tcaccccagg ctctacctgt gctgtgtgtg gcctgggaag ggtcggccta 660
 tctgctgtta tgggtgttta aagcaactgg aggcancag aatcaattgc ggtggacatc 720
 aacaaggaca aattttgcaa agggcaaaaag agttgggtgc cactgaatgc catcaacct 780
 caagnctnca ngnaaaccca tccaggnaag tgctaaaang gaatttaccg attggagggt 840
 ttggattttt cgggt 855

<210> 185
 <211> 865
 <212> DNA
 <213> Homo Sapiens

<400> 185
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 tggcttacgc aaacatgtgt cgatgtctag taacgctgaa agtaccatg gcagacaagc 180
 ctggtaacac agtgaatttc cggaagctgc tactgaaccg ttgccagaag gagtttgaaa 240
 aagataaagc agatgatgat gtctttgaga agaagcagaa agaacttgag gctgccagt 300
 ctccagagga gaggacaagg ctctcatgat aactggaaga agccaaggac aaagcccggc 360
 ggagatccat tggcaacatc aagtttattg gagaactctt taaactcaaa atgctgactg 420
 aagccatcat gcatgactgt gtgggtgaag tgctaaagaa ccatgatgaa gaatccctgg 480
 agtgccctgt tcgcctgctc accaccattg gcaaagactt ggactttgaa aaagcaaaagc 540

cacgtatgga	ccagtacttt	aatcaagatg	gagaaaattg	tnaaagaaag	aaaaacctca	600
tctagggatt	cggttcatgc	ttcaaagatg	ttatanacct	aaggctgttg	caattggggg	660
atctcgaaag	agcagatnaa	gggcctnaan	ctatcgaaaca	gattcacaaa	ganggctaaa	720
attgaaanaa	caagaatagc	caaaggggaag	gnccaacaac	tcatggacca	anggagaaat	780
agaataccaa	ggtgttccaa	aaanttggcc	aaangnnggt	tggaaanacn	gttcaaaggg	840
ggccangaaa	aantccgggt	actgg				865

<210> 186

<211> 736

<212> DNA

<213> Homo Sapiens

<400> 186

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agagtacttt	tctcagggtg	gcactttngt	ttttttaaac	aattcttgga	gttctgtggg	120
ccacagcatt	tccttctgtt	tcaatgttat	gtatgttttg	attactattg	tgatttttta	180
aattttctga	agcaagctga	gaggcaggca	gaaagatttg	atgccaaaaa	aaaaaaaaatc	240
tttcttacct	tggtcacccc	aaactttctc	aaatctggac	taaatgctat	accttaaaac	300
aaacatgagg	tgcatcttga	aggggaggga	aatttatttc	tctgcttttc	tattatacaa	360
gttggtttaca	gaaactgcaa	attaaaaaat	tacactggca	tttgagtcct	ttaaaataaa	420
ttaaaagtct	tcaacttttt	tttttttttg	ctaaacattt	ttttaagtat	gagtccttgt	480
ttaaaaagaa	aagattaaaa	cagaaaaatat	tttctataaa	taatacatgt	attttggttt	540
tagtgctccc	gccctaaggt	ttgaagttta	cttttancca	ngtacctttt	tcctccatga	600
tcaccttttt	ttctcttttc	cctctcccaa	ntcctgacac	acgtgggggt	ttccggcaan	660
aattggcctt	gctgnactgt	gattgggcga	anaacgttga	aaaacctttt	taaaaaaaaa	720
tacttaaaat	tggggtt					736

<210> 187

<211> 946

<212> DNA

<213> Homo Sapiens

<400> 187

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ctgtagaccc	caaataccat	cccaagatta	tcgggagaaa	gggggcagta	attacccaaa	120
tcgggttgga	gcatgacgtg	aacatccagt	ttcctgataa	ggacgatggg	aaccagcccc	180
aggaccaa	taccatcaca	gggtacgaaa	agaacacaga	agctgccagg	gatgtctatac	240
tgagaattgt	gggtgaactt	gagcagatgg	tttctgagga	cgtcccgtctg	gaccacccgcg	300
ttcacgccc	catcattggg	gccgcgggca	aagccattcg	caaaatcatg	gacgaattca	360
aggtggacat	tcgcttccca	cagagcggag	ccccagacc	caactgcgtc	actgtgacgg	420
ggctcccaga	gaatgtggag	gaagccatcg	accacatcct	caatctggag	gaggaatacg	480
tgagtctctg	tgggccttgg	agccctgagg	cgccctggca	cgtccaccgg	cctgaggccc	540
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ggtgagcaag	cnggcgggat	gctgggggtg	ctggggcaaa	ctgacctgt	cttcctgtct	660
tcgcctgca	gctagcctga	cgttgtggac	agtnaangcg	cctgcangtt	atacatgaaa	720
ccccagcac	acgaanaagc	caanggnacc	tttcaaaagg	ctttnttggg	gccgggacca	780
acctgggacc	gccagcaacc	aatnaaaaaa	ggcncctgacn	ttaaccaagc	tcngagggaa	840
tttccancc	tttggggggc	caaggtggct	cccaaagaac	cctccccntt	nggggcccc	900
aaacnaatna	ttgttcaaaa	anggaacaaa	aacccctctc	aagccc		946

<210> 188

<211> 802

<212> DNA

<213> Homo Sapiens

<400> 188

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tgcggnnnaa	aagtgatgaa	ggccaaaagt	ctgactgaca	tgccgggtgg	accaaganct	120
ggagtcngtt	atcntaacac	gaatgccc	gaccttggtt	taatgttaa	cantggagca	180
ngtcctganc	gggcacggcc	angcctggag	gancggccgc	acacacahcc	angcgcncagg	240
ctccctgcgg	gacctcngga	agggggaana	gcgtcaacaa	tttacggngg	gtccaaccgc	300
tgggtcaa	tgagacaa	cantgtgtgg	ttgggttcgg	gtcancangc	tggananggt	360
tcngttcntt	ttgatcanta	ncntttgggg	ccccaaaggga	nggtcntggg	anccacctga	420
nccccaaagc	tgggaaat	ctcaaagctg	cncatgtcaa	gagccttcnc	antgctgctg	480
gcggtccaag	gtgcgtcccc	caccacaaag	cctctggaag	gngccttggc	ctcttcctgt	540
gccggggggtt	tcatgtntac	ctgcancgcc	tactgtcca	ccaangtcag	ctaactgcag	600
gcnaagaca	ggaatnacag	ggtcagtctg	cccaacaacc	ccancatccc	ggcccgccct	660
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<210> 189

<211> 807

<212> DNA

<213> Homo Sapiens

<400> 189

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tgcatttcta	tcgtaacgg	gcgcggggga	gcgcagatcg	gcgcccagca	atcacagaag	180
ccgacaaggc	gttcaagcga	aaacatgacc	gctgagccca	tgagtgaag	caagttgaat	240
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agttctctc	cacgacttgc	aatgaatcaa	aacacagata	aatcagtg	ttctggaagt	360
aactctgata	tgatggaaaa	cagcaaggaa	gagggaaacta	gctcttcaga	aaaatccaag	420
tcttcaggat	cgtcacgatc	aaagaggaaa	ccttcaattg	taacaaagta	tgtagaatca	480
gatgatgaaa	aacctttgga	tgatgaaact	gtaaatgaag	atgctgtctaa	tgaaaattca	540
gaaaatgata	ttactatgca	nagcttgcca	aaaggtacag	tgattgttca	gccagagcca	600
gtgctgaatg	aagacaaaga	tgattttaaa	ggggcctgaa	tttagaagca	gaagttaaaa	660
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<210> 190

<211> 608

<212> DNA

<213> Homo Sapiens

<400> 190

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tcgtcatcat	catcatccac	tgtgacaggc	actgatttag	ataaggcttc	atctcctgaa	180
gattggcaaa	atccagtatg	tgaagacagc	actaaat	cagtcacagg	cttaattttc	240
tgttcacgc	tgcttccctc	acctatagaa	ttctgatcat	catcttctat	atcagaagaa	300
gatgaggatg	taatgtcagc	ttgcttcctt	ttagtgcttg	ttcttaggga	gtttctcttt	360
ttctccttga	caatgactgc	cttcttttta	gatgaagttc	tttgcttctt	ctttttacta	420
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tccttgaa						608

<210> 191
 <211> 786
 <212> DNA
 <213> Homo Sapiens

<400> 191
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 ttctggangg ccatttgggg aaacccaaaac ctcgggctcn acaaccctgt ccangcctgt 720
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<210> 192
 <211> 819
 <212> DNA
 <213> Homo Sapiens

<400> 192
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 atgtagaaca agactctaac aaacctgcag ctggaaactg gattcctttt aaaccaaccc 600
 gccaacacag ctggntcac ccaccancgc cgtccgtnaa aggggctctc tgggcctcac 660
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 gaanctggcg gggngcttca accctgggct tctccggct ttcggcctgg ncttgggcct 780
 tgttgaantt gntccacaaa agaaaggcca ggagcaaca 819

<210> 193
 <211> 744
 <212> DNA
 <213> Homo Sapiens

<400> 193
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 ctgcagtgca gcagccctct acccaggttc caccttcagt tattcagcag ggtgctcctc 180
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cctccttaag	ttggcttacc	tcaagactaa	tcagttgggt	acaattgggg	ggaatgttca	720
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<210> 194

<211> 567

<212> DNA

<213> Homo Sapiens

<400> 194

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tgcagaaacc	cctactggga	aatccatttc	attagttaga	actgagcatt	tttcaaagta	180
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ctagatttca	ggattacaca	aagtgagtaa	ctgtgccaaa	ttcttaaaat	ttctttaggt	300
gtggtttttg	tcagttagca	gtttttatgt	agatcnatat	ntaaaagtcc	acacctcttc	360
agacangcca	atgaaacnac	taaatttcaa	tctgtacaan	ctaaatagta	attacagtcc	420
tctangtgnn	caangatact	tacaccacat	anacaaatnt	acnntacgca	naacaacctt	480
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<210> 195

<211> 771

<212> DNA

<213> Homo Sapiens

<400> 195

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ccaagaaaga	ancanaaaag	aaagcaaaaag	cagaagctaa	acggaaggag	caagaagcta	180
aagaaaaaca	aagacaagct	gaattagaag	ctgctcggtt	agctaaggag	aaagaagagg	240
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ttaagaagga	aaggcaaaaa	tttcgaaact	catgcaagac	ctggaatcat	ttttctgata	360
atgaggcaga	gcgggttaaa	atgatggaag	aagtggaaaa	actttgtgat	cggcttgaac	420
tggcaagctt	acagtgcctg	aatgaaacac	tcacatcatg	cacaaaagaa	gtnggaaagg	480
ctgctttgga	aaaacagata	gaagaaataa	atgagcaaat	cagaaaagag	aaagagggaag	540
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aaatggaagt	aaaaattggg	cacaaagatg	ntctacaatt	actaatttna	aagctgtgaa	660
tcctgttncc	tgctggaaca	aantcaagat	gggaagttat	tgccaantac	atgaacatac	720
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<210> 196

<211> 561

<212> DNA

<213> Homo Sapiens

<400> 196

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tccttgtatc	gtttcatgca	gtccttcttt	gtcctgccag	gcaccgcttc	tgctattttt	180
tcccatcttt	caggtgtatt	tactgggtat	gttttcaaaag	cttggtccaa	aagcttctgt	240
tctttctgtg	tccaaggggt	gaagtctgta	tatggacctt	caaatcgctc	tgaaggcggt	300

gagaagcaga	aactgcgtgc	gcagggttcgt	cgtctgtgcc	aggagaatca	gtggctacgg	420
gatgaactgg	ccaacacgca	gcagaaactg	cagaagagtg	agcagtctgt	ggctcaactg	480
gaggaggaga	agaagcatct	ggagtttatg	aatcagctaa	aaaaatatga	tgacgacatt	540
tccccatccg	aggacaaaga	cactgattct	accaaagagc	ctctggatga	ccttttcccc	600
aatgatgaag	acgacccagg	gcaaggaatc	cagcagcagc	acagcagtgc	agccgcgggt	660
gccagcaag	gcngctacna	agattcccgc	gcggctgcgg	acgtccaca	acctgggtga	720
ttcagttcgc	ctcnnccang	ggccgctacc	aaggtaacct	gttgccccct	cctggcaaag	780
caaggncct	gggaagggan	cctgggagga	a			811

<210> 200

<211> 763

<212> DNA

<213> Homo Sapiens

<400> 200

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agttcacaga	gaggtgcagc	tctgacaaga	tcctagaggc	tgctagacac	agcgggcagc	180
actggagaga	gaagggaagc	tgccgggaggc	gccaccgctc	atgcaggaga	cagtgtgaga	240
gtcacgggcg	gctaggccat	gggacgctga	gcaagtcagt	taaccagccc	gagcttcatt	300
ttcctcattt	cctccccctc	gtcaggggcca	ctctcgtact	tgaccacgtc	cacgttgagg	360
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tgtttgtgaa	catttgtcaag	accctgttta	cgagacctca	tagcagcttc	ttctaactgt	480
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gtaacagttg	gnctatcaac	tttgcangct	ttgtaccaac	cgccatactc	tccaaaaaga	600
tgtcccattc	ttttgctttc	ctttgcattc	ttctcttttc	tcaacaatgc	atccaaatgg	660
gtttaatttc	aacatctaca	gaaccaaact	ccctttcatg	tgcacaagtg	agaatcnctt	720
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<210> 201

<211> 717

<212> DNA

<213> Homo Sapiens

<400> 201

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agaatganca	caattccatt	ttacaaagtt	tgctggagac	actgaagtgt	ttgaagaaa	180
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tggagctcgg	cctgagttag	gcacaggtta	tgatggcctt	gtcaaatac	ctgaatgctg	300
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ggctacggga	tgaactggcc	aacacgcagc	aagaaactgc	agaagagtga	gcagtctgtg	420
gctcaactgg	aggaggagaa	gaagcatctg	gagtttatga	atcagctaaa	aaaatatgat	480
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ccttttcccc	aatgatgaag	acgacccag	ggcaagggaa	tccancagca	gcacagcaan	600
ttgcagccgc	ggctgcccaa	gcaaggcggc	tacgagattc	ccgccgcggc	tgccggacgc	660
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<210> 202

<211> 647

<212> DNA

<213> Homo Sapiens

<400> 202

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caagattagt	agagaaaagc	agaatgcccc	aatttcacac	acagactaca	cagcaaatgc	120
tactggggca	tatcctaggg	agacccggag	tccgagcggg	gccccaggg	ctctaagtac	180
cacggagcac	gtgcggcaca	tgccttgctg	taaggcttag	ttacgtcaac	aggtcaccgt	240
catgccattg	caacaacacc	ttgtgtgaca	cttaactacc	tgttaccaa	gtgaacagct	300
aatcgctctt	aattttttaa	ctcgtgtatt	acacagttaa	tggattttan	taatacagtt	360
tatattacta	agtacatatc	tggcaaagct	acatgtatac	agaaatcagg	aaccccccca	420
aaaaggacag	cagcaccgaa	aggaatggcc	agttcacaga	nangtgcagc	tctgacaaga	480
tcctagangc	tgctagacac	agcgggcagc	actggganaa	gagaagggaa	gctgcgggag	540
gcgccaaccc	gtcatgccag	gggacagtgt	ganagtcacg	ggncgggcta	ngccaatggg	600
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<210> 203

<211> 786

<212> DNA

<213> Homo Sapiens

<400> 203

cagccatgga	cgccatcaag	aagaagatgc	agatgctgaa	gctggacaag	gagaacgcca	60
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tggaggagga	gcagcaggcc	ctccagaaga	agctgaaggg	gacagaggat	gaggtggaaa	180
agtattctga	atccgtgaag	gaggcccagg	agaaactgga	gcaggccgag	aagaaggcca	240
ctgatgctga	ggcagatgtg	gcctccctga	accgccgcat	tcagctgggt	gaggaggagc	300
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cggctgatga	gagcgagaga	ggaatgaagg	tcctcgaaaa	ccgggccatg	aaggatgagg	420
agaagatgga	actgcaggag	atgcagctga	aggaggccaa	gcacatcgct	gaggattcag	480
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ccatggacca	ngccctcaag	tccttgatgg	cctcanagga	ggagtattcc	accaaagaag	660
attaatatga	agaggagatn	aaactgttgg	anggagaagc	tgaanggagg	ctganacccc	720
aagcaaaaagt	ttgccnaaaa	ggtctgtggg	caaaaatttg	ggngaaaaac	catcnaatga	780
acctta						786

<210> 204

<211> 738

<212> DNA

<213> Homo Sapiens

<400> 204

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ctggccctca	caggttggtg	agttccagca	gggtctggtc	caaggtctgg	tgaatctcga	120
cgttctcttc	cttggcactg	gccaaaggtc	cttctaggtc	atcgatgggt	ttctccaact	180
ttgccacaga	cctctcgga	aactctgtct	gggtctcagc	ctccttcagc	ttctcctcca	240
acagtttgat	ctcctcttca	tatttatctt	ctttggtgga	atactctctc	tctgaggcca	300
tcagggactt	gagggcctgg	tccatggttc	gaagtctctc	ctccagctgt	ctggctcggc	360
tctcgccac	ctcagccctc	tcctccgagc	gctccagctc	tccttcagg	atcaccagct	420
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tcattcctct	ctcgtctctc	tcagcccgcc	ttctcggtct	ctccagcttc	tgcanngctg	600
tanccaangc	gctcctgggc	ccggtcaanc	tcctcctcaa	caagctgaat	gcggcggttc	660
aaggaaggca	anatctgctt	caacaacaat	tggccttctt	cncggccngc	tccaattttc	720
nccnggggcc	tccttcaa					738

<210> 205

<211> 818

<212> DNA

<213> Homo Sapiens

<400> 205

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tggccctcac	aggttgttga	gttccagcag	ggtctggtcc	aaggtctggt	gaatctcgac	120
gttctcctcc	ttggcactgg	ccaaggtctc	ttctaggtca	tcgatgggtt	tctccaactt	180
tgccacagac	ctctcggcaa	actctgctcg	ggtctcagcc	tccttcagct	tctcctccaa	240
cagtttgatc	tcctcttcat	atztatcttc	tttgggtggaa	tactcctcct	ctgaggccat	300
cagggacttg	agggcctggt	ccatgggttcg	aagttcctcc	tcagctgtc	tggctcggct	360
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tcattcctct	ctcggctctc	atcagccgcc	ttctcgggct	cntccaagct	tctgcaaggc	600
tgtanncann	ggctcctggg	gcccgggtnc	aagntcctcc	tcaaacangc	tnaaatncca	660
gagggtttca	nggaagggcc	aaaatctggc	ctnnagnatc	aattggcttt	cttnncnegg	720
nctngcncca	attttctccn	ggggcctncc	tttcangggg	tnaagaanaa	atttcaaatt	780
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<210> 206

<211> 927

<212> DNA

<213> Homo Sapiens

<400> 206

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tcgaccgcgc	cgagcaggcc	gaagccgaca	agaagcaagc	tgaggaccgc	tgcaagcagc	120
tggaggagga	gcagcaggcc	ctccagaaga	agctgaaggg	gacagaggat	gaggtggaaa	180
agtattctga	atccgtgaag	gaggcccagg	agaaactgga	gcaggccgag	aagaaggcca	240
ctgatgctga	ggcagatgtg	gcctccctga	accgccgcat	tcagctgggt	gaggaggagc	300
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accgcaaata	tgaagaggtg	gccaggaagc	tgggtgatcct	ggaaggagag	ctggagcgcct	540
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ccatggacca	ggccctcaag	tccttgatgg	cctcagagga	ggagtattcc	accaaagaag	660
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ccttggccag	tgccaaggag	gagaacgtcg	agattcacca	gaccttggac	cagaccctgc	840
tggaaactcaa	caacctgtga	gggccagccc	cacccccagc	caggctatgg	ttgccacccc	900
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<210> 207

<211> 910

<212> DNA

<213> Homo Sapiens

<400> 207

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cagaacataa	attattagga	aacattaaaa	atgtggccaa	gacagctaac	aaggaccact	180
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gagataaaac	caactttccc	aaaaagggag	atgttggttca	ctgctggtat	acaggaacac	420
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ccaagccttt	aagttttaag	gtcggagtag	gcaaagttat	cagaggatgg	gatgaagctc	540
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gaaagaaagg	acagcctgat	gccaaaattc	caccaaattgc	aaaactcact	tttgaagtgg	660
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taaaacntgg	ncttgaaaga	aaatttcaca	actagttnag	aaacttggtta	ccaaatggta	780
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cccaagcctt	ttngnaaaaa	aaaanccct	tatgaaancc	ccngggccca	aaaanacttt	900
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<210> 208

<211> 745

<212> DNA

<213> Homo Sapiens

<400> 208

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gggattttatc	tctcaaaagc	tgggaccaag	taaacaaatt	ttattaactc	cttgaatttt	180
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gttggttttaa	ccccctttt	cagaacagat	ttaagtanat	tttgggggac	cctcanccaa	660
ggggtcnctt	canaactggg	tttcttggg	gtttaacctt	cattnagcct	canaattttt	720
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<210> 209

<211> 965

<212> DNA

<213> Homo Sapiens

<400> 209

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cagaacataa	attattagga	aacattaaaa	atgtggccaa	gacagctaac	aaggaccact	180
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agtctgaaga	gaccctggat	gagggtccac	caaaatatac	taaatctgtt	ctgaaaaagg	360
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<210> 210

<211> 867

<212> DNA

<213> Homo Sapiens

<400> 210

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taagggattt	atctctcaaa	agctgggacc	aagtaaacaa	attttattaa	ctccttgaat	180
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<210> 211

<211> 972

<212> DNA

<213> Homo Sapiens

<400> 211

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cagaacataa	attattagga	aacattaaaa	atgtggccaa	gacagctaac	aaggaccact	180
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agtctgaaga	gaccctggat	gaggggtccac	caaaatatac	taaatctgtt	ctgaaaaagg	360
gagataaaac	caactttccc	aaaaaggagg	atgttgttca	ctgctgggtat	acaggaacac	420
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<210> 212

<211> 817

<212> DNA

<213> Homo Sapiens

<400> 212

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tctcgcaaag	agcgggaagc	tgagcttgga	gccaaagcca	aggaattcac	caatgtttat	180
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ggtaagaccc	taagtgtcaa	ggtgatgaga	gatcccaatg	ggaaatccaa	aggctttggc	300

tttgtgagtt	acgaaaaaca	cgaggatgcc	aataaggctg	tggaagagat	gaatggaaaa	360
gaaataagt	gtaaaatcat	attdttaggc	cgtgcacaaa	agaaagtaga	acggcaggca	420
gagttaaaac	ggaaatttga	acagttgaaa	caggagagaa	ttagtcgata	tcagggggtg	480
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tctctctttg	gatcaattac	cagtgtctaag	gtaatgctgg	aggatggaag	aagcaaaggg	600
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tggacgcatt	ttggggctcc	aaccactata	tgttgccctg	gccccanagg	aagggaanag	720
agaaaggntc	accttgacca	accagtttta	tgcaacgaan	tggtctgggaa	tngagaacca	780
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<210> 213

<211> 756

<212> DNA

<213> Homo Sapiens

<400> 213

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ggcactttat	gatacttttt	ctgcttttgg	aaacatactg	tcctgcaagg	tggtgtgtga	180
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ttatatcaaa	aactttgggg	aagaggtgga	tgatgagagt	ctgaaagagc	tattcagtca	420
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aaaagaaata	agtggtaaaa	tcatatttgt	aggccgtgca	caaaagaaag	tagaacggca	600
agcagagtta	aaacggaaat	ttgaacagtt	gaaacaggag	agaattagtc	gatatcangg	660
ggtgaatccc	cacattaaga	acttggatga	cactattgat	gatgaagaaa	attaaggaaa	720
agaattttcn	ccntttggga	tnaattaaca	agttgc			756

<210> 214

<211> 728

<212> DNA

<213> Homo Sapiens

<400> 214

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cagaacccaa	agaacatatt	cgtataattg	aaaaattcta	ggtgcttcat	aattgacctt	180
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gcattctgct	ctgttctctg	gggggtgctg	canccaacag	gaggcaatca	ntggntccng	600
gccttgacaa	tggaccgcaa	ggctgggggtg	cctgcaaaan	gctgtatggc	aaggatgaag	660
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<210> 215

<211> 710

<212> DNA

<213> Homo Sapiens

<400> 215

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canaacccaa	agaacatatt	cgtataattg	aaaaattcta	ggtgcttcan	aattgacctt	180
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acaagctagg	aagtcttcaa	accttgagtt	gaattccana	aggggttatt	tggcttttga	300
atcggttttt	ccttgtctaa	naggttagcag	cagcaacagc	gcccaccttc	tgggcagctt	360
ctttcttggc	atgatgagcc	tgtanaactg	ctacagcttc	atccaccttg	gagcgganag	420
actcggggga	ctctaacatg	tgcagcagct	canagtgtgc	tatctccagc	agcattcccc	480
tgatcttccc	agccagattt	gaatgcattg	tttggtatgan	tgggaacaag	cgttctccca	540
gcatctgctt	ctgttcctgn	gggggtgctg	canccangca	tggaggcaan	tcagtggctc	600
ctgccccctg	acaatggacc	gcaaggctgg	ggggtgcttg	canaaggctg	tttgggcaag	660
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<210> 216

<211> 824

<212> DNA

<213> Homo Sapiens

<400> 216

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ccgtccctg	ggctatgcct	acgtcaactt	ccagcagccg	gccgacgctg	agcgggcttt	180
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aatccaaaag	gctttgggct	ttgtgagtn	acgaaaaaca	cnaggatgcc	aataaggctg	720
ttggaaagaa	atgaatggga	aaagaaataa	antggtaaaa	tcataatttg	tagggccgtn	780
cacaaaaaga	aagtttaaac	gggnaggcaa	aatttaaaac	cggg		824

<210> 217

<211> 749

<212> DNA

<213> Homo Sapiens

<400> 217

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cagaacccaa	agaacatatt	cgtataattg	aaaaattcta	ggtgcttcat	aattgacctt	180
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ctttcttggc	atgatgagcc	tgtagaactg	ctacagcttc	atccaccttg	gagcggagag	420
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tgatcttccc	agccaagatt	tgaatgcatt	gttttgatga	gtgggaacaa	gcgttctccc	540
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ctgccccctg	acatgggacc	gcaaggctgg	ggtgcttgca	naggctgtat	gggaaggatg	660
nagggtgcc	ggncaactgg	ganggcgtat	ttgtaggggg	caaacaagcc	cggggaagca	720
nccagcagca	acancaacng	cttggcgcc				749

<210> 218
 <211> 600
 <212> DNA
 <213> Homo Sapiens

<400> 218

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atattcgtat	aattgaaaaa	ttctaggtgc	ttcataattg	accttttgat	acaaaatgac	180
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cnggtncnn	ggaggggggt	gcntgcaagc	ccagcattga	aggcaagttc	antggctcct	600

<210> 219
 <211> 1077
 <212> DNA
 <213> Homo Sapiens

<400> 219

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tggaagaagc	aaagggtttg	gcttcgtctg	cttctcatct	cctgaagaan	caaccaaagc	1020
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<210> 220
 <211> 1007
 <212> DNA
 <213> Homo Sapiens

<400> 220

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aagactggag	ggaaaaacaa	gagttccaaa	ncctggtgaa	nnaagcncat	aaaaaagaag	960
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<210> 221

<211> 833

<212> DNA

<213> Homo Sapiens

<400> 221

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aggatgacag	taaggactca	gattttctgga	agatgcttaa	tgagccagag	gaccaggccc	180
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<210> 222

<211> 745

<212> DNA

<213> Homo Sapiens

<400> 222

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caacagaggt	gaaggctcct	caactcagaa	gcacaaattg	taggggacag	ggtgggcagg	180
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<210> 223

<211> 747

<212> DNA

<213> Homo Sapiens

<400> 223

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<210> 224

<211> 618

<212> DNA

<213> Homo Sapiens

<400> 224

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<210> 225

<211> 765

<212> DNA

<213> Homo Sapiens

<400> 225

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<210> 226
 <211> 791
 <212> DNA
 <213> Homo Sapiens

<400> 226
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 ttcattgatg gaaatgtaga gagtcttatg actgaactag aaatagaaaa atcactcaaa 420
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 tcanagctca ggggaagctga ccgactcctg gcagaggctg agagtgaact ttcattgact 540
 aaagaaaaga caaaaaatgc tgttgaaaag ttcactgatg ccaagagaag tttattgcaa 600
 actgagtcag atgctgaggg aattagaaaag gagagctcan gaaactgctg ttaanctcgt 660
 caaanctgat cagcagctaa gatcgctcca agctgatgca aaaggatttg gancancaca 720
 angatcaagc aagaagaaat cttgaaaaga aattaacnaa aatttntnca gcaaaagact 780
 cagacttcaa a 791

<210> 227
 <211> 687
 <212> DNA
 <213> Homo Sapiens

<400> 227
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 gtaggttcaa atatgcagtt aaaatcactg ttttttttta aacatgttac gaagattaaa 180
 aaaaaaagg ctccagccaca tgttggttta aattcccata tgcaactatt cccatattgta 240
 ctatgtacaa gtgatttata aaaacattgg cattaatgg acaggcaaag taaactacag 300
 tggagtttca naatctcagt tcaactgcac ttgattaaaa aaaccatgtg acattccaat 360
 tatgaagtca gtgaggtagt ggaggtgttt tccctgaata tatttacaca agacagtatt 420
 cctcatctgg ctgaggcatt cttttccgga ttttgcccaa gttganagtc ctctgtgagg 480
 gaagactcca agctgagaca gactgggtga tgacgctgaa tctgcaaagg tgcctggtga 540
 ccaattcccc ctaanagcat cctacttgct tccncaaact gtgntaaagt gccctctgtc 600
 ctgccgcttt cctttaatna aaacttctgg cttnngcttg ggcanacagt gtcgganttg 660
 gggccttgag tcnngcttcc cggggaa 687

<210> 228
 <211> 810
 <212> DNA
 <213> Homo Sapiens

<400> 228
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 tacaantgga ccaactatct gagcggttg cagcctcgat ggttccttct ctgtggggga 180
 atattgtcct attatgattc tcctgaagat gcctggaaaag gttgcaaagg gagcatacaa 240
 atggcagtc gtgaaattca agttcattct gtagataata cacgcatgga cctgataatc 300
 cctggggaac agtattttota cctgaaggcc agaagtgtgg ctgaaagaca gcggtggctg 360
 gtggccctgg gatcagccaa ggcttgccctg actgacagta ggaccagaa ggagaaagag 420
 tttgctgaaa aactgaaaa cttgaaaacc aaaatgtcan aactaagact ctactgtgac 480
 ctccctgttc ancaagtaga ttaaaacata agaagtgacc acaactggtg tgtccaattc 540

tgaggtaaag	gagtcctcca	ctctggttgt	ttcgtangag	ggaattgatg	tgggaacttt	600
gctgaaatca	anctgntata	ctttttctga	aagaccttgg	taagaattca	tgcanaatngc	660
aaattgcagc	cttnaanctc	ctgaagcctn	cttctaaccg	gcaactccaac	canggaatna	720
anctnaagct	gggccaatgg	ctccaaagtt	ccaacnaaag	gttaaaanar	cccagctcaa	780
atttgggcng	caaacaaagg	gcaatccaac				810

<210> 229

<211> 552

<212> DNA

<213> Homo Sapiens

<400> 229

gtaaatttgt	ttgagttcat	tgtagattct	ggatattagc	ccttttgtca	gatgagtaga	60
ttgcaaaaat	tttctcccat	tctgtaggtt	gcctgttcac	tctgatggta	gtttcccttg	120
ctgtgcgga	gctctttagt	ttaattagat	cccatattgtc	aatttcggct	tttgttgcca	180
ttgctttcgg	tggttttagac	atgaagtcct	tgcccatgcc	tatgtcctga	atggttttcc	240
taggttttct	tctagggttt	ttatggtttt	aggtctaaca	tttaagtctc	gaatccatct	300
tgaattaatt	tttgtataag	gtgtaaggaa	gggatccact	ttcagctttc	tacgtatggc	360
tagccagttt	tccancacc	atattattaaa	tagggaatcc	tttccccant	tcctgttttt	420
gtcangtttg	tcaaagatca	natggctgta	natatgcanc	attatttccg	agggctctgt	480
tengttccat	tggtctacat	ttccgttttg	gttcnngtac	catgctgttt	tttgttacng	540
gtanaccttg	gt					552

<210> 230

<211> 842

<212> DNA

<213> Homo Sapiens

<400> 230

ctcatcagtt	agaagaaaaa	gaaaatcaaa	ttaagagcat	gaaggctgat	attgaaagtc	60
ttgtaacaga	aaaagaagcc	ttacagaagg	aaggaggcaa	tcagcaacag	gctgcttctg	120
aaaaggagtc	ttgtataaca	cagttgaaga	aagagttatc	tgaaaacatc	aatgctgtca	180
cattgatgaa	agaagagctt	aaagaaaaaa	aagttgagat	tagcagtcct	agtaaacaac	240
taactgattt	gaatgttcag	cttcaaaaata	gcatacagct	atccgaaaaa	gaagcagcca	300
tttcatcact	aagaaagcag	tatgatgaag	aaaaatgtga	attgctggat	caggtgcaag	360
atattatctt	taaagttgac	actctgagta	aagagaaaat	ttctgctctt	gagcaggtag	420
atgactggtc	caataaattc	tcagaatgga	agaagaaagc	acagtcaaga	tttacacagc	480
atcaaaacac	tgtaaaagaa	ttgcagatcc	agcttgagtt	aaaatcaaaag	gaagcttatg	540
aaaaggatga	gcagataaat	ttattgaagg	aagagcttga	tcagcaaaaat	aaaagatttg	600
attgtttaaa	gggtgaaatg	gaagacgaca	agagcaagat	gggagaaaaa	ggagtcta	660
ttagaaacag	agttaaagtc	tcaaacagca	agaattattg	gattagagga	ccatattanc	720
caagaaaact	atgttgaaat	tagagtccct	aaatngaaag	ttccttaaaa	aattacaatc	780
aacaaaaaag	atattggacc	acaaagna	at	tggttcaaaa	aaccttcaac	840
ga						842

<210> 231

<211> 781

<212> DNA

<213> Homo Sapiens

<400> 231

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tttgcataca	atacagttat	gtattggcta	ttcacaattt	acagtagtgt	tttttccctc	120
gaaaaatata	agtacaaaag	ctaagtaa	aatgaggtac	tgccatttgg	gattttttac	180
atgtcttagc	ttaaagaact	ggtctttagc	aaatattcaa	cagatcaacc	tgaataaaat	240

agtcaattaa	atgctcta	at	ttatcagaaa	aaatccacta	agtttcacct	caaaatgtat	300
tgcacaagtc	tttttaaaaa	at	caccctaa	aaataaatag	gaaaggtaag	cggttcttta	360
aaaagaatgg	atgaaaggaa	tattatgtaa	gcccataaag	cagggttaagt	tatcaaaata		420
tcttttaaac	aacataaaaac	tcttcccaag	agaaaactga	agaaaaaact	atcaccattt		480
ctccactgat	aaaatctatt	ttaaaggcag	tctgcaactt	atctgtgggc	cagatttttc		540
ttgggtcttt	tggctacatg	aggggccctg	aatgacaact	tcattctcaa	agagtagcaa		600
agtgtggaca	agttttccaa	gcagcangtc	acccaatgtc	actcttcctc	aagatgaagg		660
atcggagcca	tgacacatgt	ttactaagc	acagaccgga	tgggtttacc	cagaagatac		720
cactggcaan	ggtgaagtaa	acatcaggcc	gaggcaacct	tcccnttttc	aaaaantttt		780
c							781

<210> 232

<211> 767

<212> DNA

<213> Homo Sapiens

<400> 232

gttatatagt	aaataaactt	tatttatctg	tttctcagag	atgacactgc	caacaatcac	60
agatttgc	acaatacagt	tatgtattgg	ctattcacia	tttacagtag	tggtttttcc	120
tctgaaaaat	ataagtacaa	aagctaagta	aacaatgagg	tactgccatt	tgggattttt	180
tacatgtctt	agcttaaaga	actggctctt	agcaaatatt	caacagatca	acctgaataa	240
aatagtcaat	taaatgctct	aatttatcag	aaaaaatcca	ctaagtttca	cctcaaaatg	300
tattgcacia	gtctttttta	aaaatcaccc	taaaaaataa	taggaaaggt	aagccgttct	360
ttaaaaagaa	tggatgaaag	gaatattatg	taagcccata	aagcagggtta	agttatcaaa	420
atatctttta	aacaacataa	aactcttccc	aagagaaaaa	tgaagaaaaa	actatcacca	480
tttctccact	gataaaatct	attttanagg	cagtctgcaa	cttatctgtg	ggccagattt	540
ttcttgggtc	tttggctaca	tgagggggccc	tgaatgaaaa	cttcattctc	aaaggagtag	600
caagtgtggg	acagttttcc	aagcagcagt	cacccaatgt	cactcttctt	caagatgaaa	660
gatcggagnc	atgacacatg	ttaacctaag	nacangactg	gaggggtttac	ncangaagat	720
acactgcgaa	ggtgaaagtt	aaacatcaag	ccgaggaacc	tccccctt		767

<210> 233

<211> 879

<212> DNA

<213> Homo Sapiens

<400> 233

gggagtttaa	tacacagctg	gcacaaaagg	aacaagagct	ggaaatgacc	ataaaagaaa	60
ctatcaataa	ggcccaggag	gtggaggctg	aactttttaga	aagccatcaa	gaagagacaa	120
atcagttact	taaaaaaatt	gctgagaaag	atgatgatct	aaaacgaaca	gccaaaagat	180
atgaagaaat	ccttgatgct	cgtgaagaag	aaatgactgc	aaaagtaagg	gacctgcaga	240
ctcaacttga	ggagctgcag	aagaaatacc	agcaaaagct	agagcaggag	gagaaccctg	300
gcaatgataa	tgtaacaatt	atggagctac	agacacagct	agcacagaag	acgactttaa	360
tcagtgatcc	gaaattgaaa	gagcaagagt	tcagagaaca	gattcacaa	ttagaagacc	420
gtttgaagaa	atatgaaaag	aatgtatatg	caacaactgt	ggggacacct	tacaaagggtg	480
gcaatttgta	ccatacggat	gtctcactct	ttggagaacc	taccgaattt	gagtatttgc	540
gaaaagtgtc	ttttgagtat	atgatgggtc	gtgagactaa	gacctaggca	aaagttataa	600
ccaccgtact	gaagtccctc	gatgatcaga	ctcagaaaat	tttgggaaaa	gagaagatct	660
cggctgatgt	ttacttcacc	tcgcagtggg	atcctcngag	taaaccatca	gtcgtgccta	720
agtttacatg	tgtcatgggt	ccgattcttc	atcctttgaa	gaaagagtgg	acattgggggt	780
naccggctgc	cttgggaaaa	ctgtccanac	nttgcnaacn	ccttggggaa	atggaagntt	840
ttccanttca	agggccccc	caangnttgc	ccaaaacagg			879

<210> 234

<211> 780

<212> DNA

<213> Homo Sapiens

<400> 234

aaactttatt	tatctgtttc	tcagagatga	cactgccaac	aatcacagat	ttgcatacaa	60
tacagttatg	tattggnnng	gcacaattta	cagtagtggt	ttttcctctg	aaaaatataa	120
gtacaaaagc	taagtaaaca	atgaggtact	gccatttggt	atTTTTtaca	tgtcttagct	180
taaagaactg	gtcttttagca	aatattcaac	agatcaacct	gaataaaaata	gtcaattaaa	240
tgctctaatt	tatcagaaaa	aatccactaa	gtttcacctc	aaaatgtatt	gcacaagtct	300
ttttaaaaaa	tcaccctaaa	aataaatagg	aaaggtaagc	cgttctttta	aaagaatgga	360
tgaaaggaat	attatgtaag	cccataaagc	agggttaagt	atcaaaatat	cttttaaaaa	420
acataaaaact	cttcccaaga	gaaaactgaa	gaaaaaacta	tcaccatttc	tcactgata	480
aaatctatatt	taaaggcagt	ctgcaactta	tctgtgggcc	agatttttct	tgggtcttttg	540
gctacatgag	gggccctgaa	tgaaaacttc	attctcaaa	agtagcaagt	gtggacaagt	600
tttccaagca	gcagtcanc	aatgtcactc	ttcttcaaga	tgaaagatcg	gagccatgac	660
acatgttaac	taagcacaga	cntgatgggt	tactncagaa	gattaccact	gcnaagggtga	720
aagttaaaca	tcaagncgag	catnctctc	tttccaaaaa	ttttccgng	tccggattca	780

<210> 235

<211> 780

<212> DNA

<213> Homo Sapiens

<400> 235

attctgaggg	tatatataagt	cagagtcagg	ataaatcact	tcggagaata	gcagaattaa	60
gagaggagct	ccaaatggac	cagcaggcaa	agaaacatct	gcaagaggag	tttgatgcat	120
cttttagagga	gaaagatcag	tatatcagtg	ttctccaaac	tcagggtttct	ctactgaaac	180
aacgattacg	aaatggccc	atgaatgttg	atgtactgaa	accacttctc	cagctggaac	240
cacaggtcga	agtcttcact	aaagaagaga	atccagaaag	tgatggagag	ccagtagtgg	300
aagatggaac	ttctgtaaaa	acactggaaa	cactccagca	aagagtgaag	cgtcaagaga	360
acctacttaa	gcggttgtaag	gaaacaattc	agtcacataa	ggaacaatgt	acactattaa	420
ctagtgaaaa	agaagctctg	caagaacaac	tggtatgaaag	acttcaagaa	ctagaaaaga	480
taaaggacct	tcatatggcc	gagaagacta	aacttatcac	tcagttgcgt	gatgcaaaga	540
acttaattga	acagcttgaa	caaggataag	ggaatggtaa	tcgcagagac	aaaacgtcag	600
atgcatgaaa	ccctggaaat	gaaagaagaa	gaaattgctc	aactccgtag	tcgcatcaaa	660
cagatgacta	cccaagggag	aggaattacg	ggaacaagan	agaaaagtcc	gaaagaactg	720
cntttgaggg	aacttgaaaa	agccttgagt	acagnccaaa	aanacagngg	aagccaccgg	780

<210> 236

<211> 711

<212> DNA

<213> Homo Sapiens

<400> 236

cttgggtttt	aaatttggtt	tcatattcct	cattcaaaat	atgaatactg	tcctccttgg	60
ctgacaattt	ctgtgtgagt	atctcaattt	ctttcttctg	tccttctctc	atttgtaaaa	120
tcatattttc	cttttccacc	aagatttgct	ttgtctgttc	ctgttctttg	ttaccatctt	180
caagtttgga	ctcatagact	tgggttaaag	atTTTtacttt	ttgtctcatt	tcactatttt	240
gtttttcaag	ttgctgcatt	aagtcctgca	cctggatttt	gtgagcatct	aactcagtac	300
aaacatcttt	cttttggtgt	tcaacttcag	caacctgttt	ggtaagaaga	attctttctg	360
tttccaaatc	caacaacttc	tgctgcaatt	gggccaactg	ttcctcatat	gcttttgtct	420
gctcatgtgt	ggcactctgg	taagactgaa	aaacgtccag	cttagcagat	gcctgctgga	480
gttccccctt	agacctttta	atatctgcct	ccaaattttt	tacatgagcc	tgatgctctt	540
tcaaatgctt	gtccctttcc	ttcaagagaa	gctcaagttg	nttaanttga	tcttttaaa	600
ccttctcaan	tcctccggga	tanaaaacnt	cgtgttcttt	naatgagaac	ggtcaacntg	660

ccggctgggt gataantttt ccgttcacnc anccttgggg ctccaaattc c

711

<210> 237

<211> 658

<212> DNA

<213> Homo Sapiens

<400> 237

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tgcatacaat	acagttatgt	attggctatt	cacaattttac	agtagtggtt	tttcctctga	120
aaaatataag	tacaaaagct	aagtaaaca	tgaggtagct	ccatttggga	ttttttacat	180
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tcaattaaat	gctctaattt	atcagaaaaa	atccactaag	tttcacctca	aatgtattg	300
cacaagtctt	tttaaaaaat	caccctaaan	ataaatagga	aaggtaagcc	gttctttaa	360
aagaatggat	gaaaggaata	ttatgtaagc	ccataagagc	aggttaagtt	atcaaaatat	420
ctttttaaaca	ncataaaact	cttcccanga	gaaaactgaa	gaaaaaacta	tcaccatttc	480
tccactgata	aaatctat	taaaggcagt	ctgcanccta	tctgtgggcc	aagatttttc	540
ttggnctttt	ggctacatga	gggggacctg	gaatgaaaaa	cttcattccc	aanggagttt	600
gcnaggtgtg	ggacagggtt	tccaaggcaa	gcaagtnagc	caaantngtca	gctcttcc	658

<210> 238

<211> 678

<212> DNA

<213> Homo Sapiens

<400> 238

gttatatagt	aaataaactt	tatttatctg	tttctcagag	atgacactgc	caacaatcac	60
agatttgcat	acaatacagt	tatgtattgg	ctattcacia	tttacagtag	tgttttttcc	120
tctgaaaaat	ataagtacaa	aagctaagta	aacaatgagg	tactgccatt	tgggattttt	180
tacatgtctt	agcttaaaga	actggtcttt	agcaaatatt	caacagatca	acctgaataa	240
aatagtcaat	taaatgctct	aatttatcag	aaaaaatcca	ctaagtttca	cctcaaaatg	300
tattgcacaa	gtctttttta	aaaatcaccc	taaaaaataa	taggaaaggt	aanccgttct	360
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atatctttta	aacaacataa	gaactcttcc	caaggagaaa	actgaannaa	aaaactatca	480
ncatttcnnc	actgataaaa	tctantttta	aggggnagtcn	gcaacttanc	tgtggggccag	540
atttttccgt	ggggtttttg	ggctacantn	agggggccct	gaatgaaaaa	nttcaattcc	600
ncaaatgnng	tagcaaattg	tgggncangt	ttttccaaag	cagncaantt	cancccnana	660
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<210> 239

<211> 1402

<212> DNA

<213> Homo Sapiens

<400> 239

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atcagttact	taaaaaaatt	gctgagaaaag	atgatgatct	aaaacgaaca	gccaaaagat	180
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ctcaacttga	ggagctgcag	aagaaatacc	agcaaaagct	agagcaggag	gagaacctg	300
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gcaatttgta	ccatacggat	gtctcactct	ttggagaacc	taccgaattt	gagtatttgc	540
gaaaagtgtc	ttttgagtat	atgatgggtc	gtgagactaa	gaccatggca	aaagttataa	600

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tcctttcatc	cattcttttt	aaagaacggc	ttacctttcc	tattttattt	tagggtgatt	1080
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ttttgtactt	atatttttca	gaggaaaaaa	cactactgta	aattgtgaat	agccaataca	1320
taactgtatt	gtatgcaaat	ctgtgattgt	tggcagtgtc	atctctgaga	aacagataaa	1380
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<210> 240

<211> 760

<212> DNA

<213> Homo Sapiens

<400> 240

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aaaataatgg	cttttggtct	tttggctttt	ttattatctt	aatatgtgta	tccacaatta	120
tggtatcaac	tcaatatgaa	aaactcaact	taattttgtg	catgattttc	ataccttctt	180
tcactttgct	ggggtatgtc	atgttattga	tccagctcga	ctttatgaga	aacttgagaa	240
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gaaatgtttc	cnttttgtgt	aaaaaagggtg	aaagtttttg	ggattaccta	ggacacaatg	660
ggagctggta	aaagtacttc	cattaaaaatg	ataacntggg	tgacacaaagc	caaactgcan	720
ggagtggtgg	gtgttacaaa	ggnagcagan	gcacnnggta			760

<210> 241

<211> 745

<212> DNA

<213> Homo Sapiens

<400> 241

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cnnggtatt	acatcaatac	agctataaca	ttaatgcagc	aattatataa	cacaaaagtg	120
ctataatgac	atgggaaatg	ttcatgaact	gtgaggtgaa	aagatacaga	aaatgactat	180
gctacngat	actacctttg	aaaaaggatc	cataaaaaat	acattgaata	taagttggct	240
aaagaaaata	ttaactgcgg	tactttctta	cagattangg	ctancttctt	ccatataact	300
tcaatatgta	ctaaaattca	catgcattta	ttttataatc	agaatgtcat	tataattaaa	360
tgttangctg	tgccatttca	tcagttttatc	anaccttctt	atagtcaatg	tcacattaaa	420
ttagaatccg	agtaaataan	gtttaaaaat	anctgatata	tttgaagttc	aggctaaaaa	480
cctcatattt	ttattttgtaa	aatgttctca	ntgttagctt	tattgataat	aaccgataac	540
caacctataa	ttgtangatt	tttaaaattat	ttttaagcac	aaantagacc	catgttgggg	600
atgaataaca	tgctngattt	tgtnaatttt	ggctnacnac	ttttcccaaa	aatttccttg	660
tttctttcan	ccnaaatttt	taaaantgaa	aactgtatca	attatggaan	gggtttattaa	720
aangtttnc	tttggttaacc	ngaag				745

<210> 242
 <211> 818
 <212> DNA
 <213> Homo Sapiens

<400> 242
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 agaacctgct gaaattaaga tcatcagaga agcatataag aaggcctttt tatttggttaa 120
 caaaggctctg aatacagatg aattagggtca gaaggaagaa gcaaagaact actataagca 180
 aggaatagga cacctgctca gagggatcag catttcatca aaagagtctg aacacacagg 240
 tcctgggttg gaatctgcta gacagatgca acagaaaatg aaagaaactc tacagaatgt 300
 acgcaccagg ctggaaattc tagagaaggg tcttgccact tctctgcaga atgatcttca 360
 ggaggtgccc aagttatata cagaatttcc acctaaagac atgtgtgaaa aattaccaga 420
 gcctcagtct tttagttcag ctctcagca tgctgaagta aatggaaaca cctcaactcc 480
 aagtgcaggg gcagttgctg cacctgcttc tctgtcttta ccatcacaaa gttgtccagc 540
 agaagctcct cctgcttata ctctcaagc tgctgaaggc cactacactg tatcctatgg 600
 aacagattct ggggagtttt catcagttgg agaggagttt tatagggaat cattctcagc 660
 caacggcctc tttagaacct taagggtctg gattcangat gaaattgatt ttgataccaa 720
 atgggagtac annttttttt tgtaaactct gcaangggga ngttatgcan cttcgtancc 780
 ccgggtgacc ttcnaattgt gaagggtttt gggntaaa 818

<210> 243
 <211> 799
 <212> DNA
 <213> Homo Sapiens

<400> 243
 aatttcttga agtacttttt taatccaatt aagctgataa taatcacttc gaattttaat 60
 acaatacaat catgttccca aatttccnag gtcataaca atacagtctc aatacaaaaag 120
 acgtaataat ctatttttat tcatttttaa tcaaagaac cattccattt cctaacaaac 180
 aggtaagtta caaaagtagt ccatttttact tttcatcagt ctttccctgt tttgaacaag 240
 tctttttgag aattcttagt tttagttttt gtttagctta cacactgaaa attttgagaa 300
 gcatctaaaa aaatccacaa ttagtgcaaa aagaggggac aatactttaa gtcattcctt 360
 ctataaaaaag aattaagggtt actaaatgcc aatttttaag caaatatata gtttcctatt 420
 tgccttctga aagacagcag atataaaaaat agttcaatat taggtttaac aagggttgaa 480
 caacacatgt actatcagct ttatttttacc tgcaaaaata ttttagctac acttggaana 540
 aaaataaact tgagaatata acttcacatt tctaaggcca gatgcaagaa tacttaatct 600
 tttcctttta aatagaagac atgccataaa atttatgaaa agttaatttg taggaatggg 660
 atacatttaa aaaatacngg ttaaaccngg tgagggaatt ccacatttgg cctatttaac 720
 aaaaatttta aaccaatttt caaaaggggc tttggggtaa aaagtngatt cccaagcaac 780
 ntcaancant ttaaccttc 799

<210> 244
 <211> 726
 <212> DNA
 <213> Homo Sapiens

<400> 244
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 tctacttcac cagcagcagc gttaattcat ctgcctacac tatttacatg ggaaaagata 120
 aatatgaaaa tgaagatctg atcaagcatg gctggcctga agatatctgg tttcatgtgg 180
 acaaaactctc ttcggctcat gtataccttc gattacataa gggagagaat atagaagaca 240
 tcccaaagga agtgctgatg gactgtgccc acctgttgaa ggccaatagc attcaaggct 300
 gcaagatgaa caacgttaat gtggtatata cgccgtgggc taacctgaag aaaacagctg 360
 acatggatgt ggggcagata ggctttcaca ggcagaagga tgtaaaaatt gtgacagtgg 420

agaagaaagt	aaatgagatc	ctgaaccgat	tagaaaagac	caaagtcgag	cggttcccag	480
acctancagc	agagaaaagaa	tgcagagatc	gtgaagagag	gaatgagaaa	aaagcccaaa	540
ttcaggaaat	gaaaaagaga	gaaanagaag	aaatgaagaa	gaanagggaa	atggatgaac	600
ttangagcta	ttcatcacta	atgaaagttt	gaaaatatgt	cttcanatca	ggatggcaat	660
ggattcagat	gaattcatgt	taaaaggaga	aaaggngaaa	aaggaccttt	gaaaaatttg	720
aatgtt						726

<210> 245

<211> 592

<212> DNA

<213> Homo Sapiens

<400> 245

ccagattaaa	aaaatggtat	tttattataa	cttttaaaat	tgcggaacat	cagactgaat	60
atcatcagac	acatacacia	aaccactcat	ctctaaagtc	atcttctata	ccctctcaaa	120
atttggccag	tgagttttgc	ctcagggaa	tttccagttc	aaccccatat	accaacatgg	180
aataaatgga	aacactagcc	ttttggtttt	gcccanaagt	ccaaagtgtc	attacaggtg	240
gaatatctgc	tgcaggaagt	cattcttgc	gctgtgggtg	tgagtaaaat	gcttagttcc	300
ttctaaaatc	ataattgcaa	tatggacttc	tgcttcacgc	tgcatcctaa	ggcaciaaat	360
aggtaacct	catctcccaa	atgatcaaca	ggagcactcc	atcctatttt	accctcaatg	420
cnganaaatt	acnctgggc	ccanaagttg	tcacataggt	ggcttgggtt	acttggggct	480
caggcaacaa	ctgccacagg	ccccagcttg	atgaanacca	tcnatttctt	taaaatatgt	540
tggnnactaa	gatggaggcc	tccggcncan	agggaancan	nggacataaa	ac	592

<210> 246

<211> 821

<212> DNA

<213> Homo Sapiens

<400> 246

aggatgaaga	gctggagagc	gccgaggacg	acgagcgagc	ctgtcggggc	cgcgagtcgg	60
acgaagacac	tgaggatgct	agtgaactg	acctggcaaa	gcatgatgaa	gaagactatg	120
tagaaatgaa	ggaacagatg	tatcaggaca	aactggcttc	tctcaagagg	cagttgcaac	180
aactgcaaga	aggtaacatta	caggaatatc	agaagagaa	gaaaaaacta	gatcagcagt	240
acaaagagag	gatacggaa	gcagaactct	tcctccagct	ggaaactgaa	caagtggaa	300
gaaattacat	taaagaaaag	aaggcagcag	tgaaagaatt	tgaagacaag	aaggttgagc	360
tgaaagagaa	cctgattgct	gagctagaag	aaaagaagaa	aatgattgaa	aatgaaaagc	420
tgacaatgga	actgactgga	gattctatgg	aggtgaaacc	tatcatgacc	agaaagtgtc	480
ggaggcgacc	aaatgatccc	gtccccatcc	cgacacaagag	gaggaaaacct	gctccagccc	540
agctaaaacta	tttgtttaaca	ggatgaacag	atcatggagg	atctgagaac	attaaataag	600
cttaagtcac	ccaagagacc	agcatctcca	tcctctcctg	agcacttgcc	tgcaacaccc	660
gccggaatct	ccaagcccca	gaggttcnaa	agccccggat	anaagaatgg	caaacctgtt	720
actatgacaa	aaagatgggt	accacaagag	ccaaggccat	cctatcctgg	angtcaaagg	780
gacaaaccan	gaaactgaag	cctgcctnat	taagtttccg	t		821

<210> 247

<211> 639

<212> DNA

<213> Homo Sapiens

<400> 247

gttacacaaa	gcattttattt	ctctgagaag	gccgagagcc	acgagaattc	atcatctcct	60
gctaggacct	ctgccccaa	cttctgggca	aatagtgaat	tggacgcgac	agggaaagta	120
gctacgtgat	ccactaatca	gattcaaaac	atgaaaatgc	actggagagt	gtatcccttc	180
ctgctcttct	ccatggtaga	gagacttaaa	gataatcaat	aaaaatagct	gtcccttcaa	240

actcagagga	ggtttttcaaa	aacaagtata	agcaaaaaaat	aaagaaataa	aaggaaagta	300
aatcaaacc	cccaatacgc	ctgaaagtaa	aacagtctca	tggtagactga	tgtctggaan	360
aagttgaggc	agaaaagact	gacaaagttg	gaangcatcc	cggccacaaa	agtgccnaa	420
aagaattcan	tgcatgtctc	tccattttcca	aggctgagta	actattccca	gntaagttaa	480
cattttttna	nttaaggana	nancgaanac	anntncatnt	ctanatccca	ctccagaaat	540
anggtcaatg	agaangangc	actgtannna	aagtcaagna	gctggancnc	ccgggcggnt	600
tnacccaaga	gcccgcgcgt	nnaagcctgg	gcccaagct			639

<210> 248

<211> 846

<212> DNA

<213> Homo Sapiens

<400> 248

aacaggatgt	caaaaattaa	actgcgcttt	ccatcacaat	agaggacgat	atgttgatgg	60
cctttttccta	cctccgagca	aaactgtgtt	gcccactgtg	cctgagtcac	cagaagagga	120
agtgaaggct	agccaacttt	cagttcagca	gaacaaattg	tctgtccagt	ccaatccttc	180
ccctcagctg	cggagcggtta	tgaaagtaga	aagttccgaa	aatgttccta	gccccacgca	240
tccaccagtt	gtaattaatg	ctgcagatga	tgatgaagat	gatgatgatc	agttttctga	300
ggaaggtgat	gaaaccaaaa	cacctaccct	gcaaccaact	cctgaagtgc	acaatggatt	360
acgagtgaat	tctgtccgga	aacctgcagt	caatataaag	caaggtgaat	gtttgaattt	420
tggaataaaa	actcttgagg	aaattaagtc	aaagaaaaatg	aaggaaaaat	ctaagaagca	480
aggtgaggggt	tcttcaggag	tttccagttc	tttactccac	cctgagcccg	ttccagggtc	540
tgaaaaagaa	aatgtcagga	ctgtggtgag	gacagtaact	ctctccacca	aacaaggaga	600
agaacccttg	gttagattga	gtcttactga	gagactgggg	aaacgaaaaat	tttcagcagg	660
cgggtgacagt	gatcctccat	taaagcgtag	cctggcacan	aggctaaggg	aagaaagttg	720
aagctccaga	aactaacant	gacaaaacac	caangaaagc	tcaagtttcc	aagtccectt	780
aaaggggcga	attaggcattg	tcagccngga	ttcaagataa	tnagggatgc	aacaagatta	840
aaggtt						846

<210> 249

<211> 763

<212> DNA

<213> Homo Sapiens

<400> 249

gacttttcta	catcagtttt	atttaaaaca	caaacaagta	tttctctttc	tgtaagggca	60
aatggttcaa	ataatgcgga	acacgaaaca	ttgactaata	caagtgcctt	aaatatgaaa	120
caaaattatt	ttttaaaaaa	gcaaaaagaat	aaagaatata	tacaaaaggg	acctggaatc	180
tgtaagctga	ttccaaaaat	gaaataagta	gaaaatccat	ggtagaacct	gaacattcta	240
cctctgcttt	ggagaagggc	tatcatacaa	cattcagtc	gctgaagatg	gattggtaga	300
ggtgtgtcta	tacataaaact	tcagtcattt	ttgcttgtgc	agaatcatcc	caatcttccc	360
aagactgaat	gggcagtcct	gtggctttct	tcctttttcca	tattcccaac	aaggctacgt	420
gaagttcaac	tcttgatgag	ccgcttacaa	cagcagttcc	ttaggagcca	acatgacagg	480
tgggtcagat	ttccctatga	gaaacaaaac	tggccaccta	cagcaaaaata	tcaaaatggg	540
taagtccttc	cttctctctc	ctcctgatta	tataacaacat	atctcctttc	aagactatta	600
tttccatcat	gccttattcc	ttcacaaatc	taaaccttga	ngtgatatga	angaaaccaa	660
catcaagaaa	agaaaactca	attcagaaat	gaanaaaacg	ggcaggtata	caatacaccc	720
cagagcatct	caatatcccc	tgggacagnt	acaattcagt	gtt		763

<210> 250

<211> 899

<212> DNA

<213> Homo Sapiens

<400> 250

attcaagtca	agagatgtga	gaccatgaga	gagaagcaca	tgcagaaaca	gcaggagagg	60
gaaaaaatcag	tcttgacacc	tcttcgggga	gatgtagcct	cttgcaatac	ccaagtggca	120
gagaaaccag	tgctcactgc	tgtgccagga	atcacacggc	acctgaccaa	gcggcttccc	180
acaaagtcac	cccagaaggt	ggaggtagaa	acctcagggg	ttggagactc	attattgaat	240
gtgaaatgtg	cagcacagac	cttggaaaaa	aggggtaaag	ctaaacccaa	agtgaacgtg	300
aagccatctg	tggttaaagt	tgtgtcatcc	cccaaattgg	ccccaaaacg	taaggcagtg	360
gagatgcacg	ctgctgtcat	tgccgctgtg	aagccactca	gctccagcag	tgtcctacag	420
gaacccccag	ccaaaaaggg	agctgtggct	gttgtcccgc	ttgtctctga	ggacaaatca	480
gtcactgtgc	ctgaagcaga	aaatcctaga	gacagtcttg	tgtgcctcc	aaccagtc	540
tcttcagatt	cctcaccccc	ggaggtgtct	ggcccttcc	catcccaa	gagcatgaaa	600
actcgcgcgac	tcagctctgc	ctcaacaagg	aaagccccca	ctctctgtgg	aggatgattt	660
tgagaaacta	atatgggaga	tttcaaggag	gcaaaattgg	naactganat	tgacctggat	720
tctgggaaaa	gatgaagatg	acccttccgg	cttngngcct	atcaannaaa	ngattgntan	780
cctgaaaggg	tggttaattga	nggacncctt	naaaaaaaaa	atccnccaaa	aaaactnngg	840
ccttaanttc	naccaaattg	taacaatttn	acctgagaat	gnttaatttc	ctttagggc	899

<210> 251

<211> 755

<212> DNA

<213> Homo Sapiens

<400> 251

cctacatcag	ttttatttta	aacactaaca	agtattttct	tttctgtaag	ggcaaatgg	60
tcaaataatg	cggaacacga	aacattgana	nagacaagtg	ctttaaatat	gaaacaaaat	120
tattttttta	aaaagcaaaa	gaataaagaa	tatatacaaa	agggacctgg	aatctgtaag	180
gtgattccaa	aaacgaaata	agtagaaaat	ccatgggtgaa	acctgaacat	tctacctctg	240
ctttggagaa	gggctatcat	acaacattca	gtcagctgaa	gatggattgg	tagagggtgtg	300
tctatacata	aacttcagtc	atTTTTgctt	gtgcagaatc	atcccaatct	tcccaagact	360
gaatggggcag	tctgtgtggc	ttcttccctt	tccatattcc	caacaaggct	acgtgaagtt	420
caactcttga	tgagccgctt	acaacagcag	ttccttagga	gccaacatga	cagggtgggtc	480
agatttccct	atgagaaaca	aaactggcca	cctacagcaa	aatatcaaaa	tgggtaagtc	540
cttcccttcc	cttctctctg	attatataca	acatatctcc	tttcaaagac	tattatttcc	600
atcatgctta	ntccttcaca	aatctaaaac	ttgagggtgat	atgaaggaaa	ccaacatcan	660
gaaaagaaaa	ctcaattcag	aaatgaagaa	aacggggcang	tatacaattc	anccccagag	720
caacccaata	atccctgggc	aaaagttcaa	ttcaa			755

<210> 252

<211> 753

<212> DNA

<213> Homo Sapiens

<400> 252

cctacatcag	ttttatttta	aacactaaca	agtattttct	tttctgtaag	ggcaaatgg	60
tcaaataatg	cggaacacga	aacattgact	aatacaagtg	ctttaaatat	gaaacaaaat	120
tattttttta	aaaagcaaaa	gaataaagaa	tatatacaaa	agggacctgg	aatctgtaag	180
gtgattccaa	aaacgaaata	agtagaaaat	ccatgggtgaa	acctgaacat	tctacctctg	240
ctttggagaa	gggctatcat	acaacattca	gtcagctgaa	gatggattgg	tagagggtgtg	300
tctatacata	aacttcagtc	atTTTTgctt	gtgcagaatc	atcccaatct	tcccaagact	360
gaatggggcag	tctgtgtggc	ttcttccctt	tccatattcc	caacaaggct	acgtgaagtt	420
caactcttga	tgagccgctt	acaacagcag	ttccttagga	gccaacatga	cagggtgggtc	480
agatttccct	atgagaaaca	aaactggcca	cctacagcaa	aatatcaaaa	tgggtaagtc	540
cttcccttcc	cttctctctg	gattatatac	aacatatctc	ctttcaagac	tattatttcc	600
atcatgcnta	atccttcaca	aatctaaaac	cttgagggtg	atagaaaagg	aaaccaacat	660
canagaaaaag	aaaactcaat	tcaagaaaat	taagaaaacc	tggcaaggta	tacaaatata	720

ccccaggag catcccaaata aatccctggg aaa

753

<210> 253

<211> 793

<212> DNA

<213> Homo Sapiens

<400> 253

gactttccta	catcagtttt	atttaaaaca	ctaacaagta	tttcnctttc	ngtaagggca	60
aatgggttcaa	ataatgcgga	acacgaaaca	ttgactaata	caagtgcctt	aaatatgaaa	120
caaaattatt	ttttaaaaaa	gcaaaagaat	aaagaatata	tacaaaagg	acctggaatc	180
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ggtgtgtcta	tacataaaact	tcagtcattt	ttgcttgtgc	anaatcatcc	caatcttccc	360
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catcangaaa	agaaaactca	attcagnaat	gaangaaaac	tgggaggtat	ttaatanacc	720
cccangnnga	atccaaatac	cctggnaana	gttcaattca	antgtacngc	naaagnccat	780
aantaantat	tgg					793

<210> 254

<211> 625

<212> DNA

<213> Homo Sapiens

<400> 254

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tcaaataatg	cggaaacacga	aacattgact	aatacaagtg	ctttaaatat	gaaacaaaat	120
tattttttta	aaaagcaaaa	gaataaagaa	tatatacaaa	agggacctg	aatctgtaag	180
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ctttggagaa	gggctatcat	acaacattca	gtcagctgaa	gatggattgg	tanagggtg	300
tctatacata	aacttcagtc	atttttgctt	gtgcagaatc	atcccaatct	tcccaagact	360
gaatgggcag	tcctgtggct	ttcttctttt	tcctatttcc	caacaaggct	acgtgaagtt	420
caactcttga	tgagccgctt	acaacancaa	gttctctang	agccaacatg	acagggtggg	480
tcangatttc	cctatgagaa	acaanactgg	ccacctacag	caaaaatatn	aaaatggggt	540
aagtccttcc	ttctctcttc	tcctgaatta	tatncaacat	ntctcctttt	caagacnatt	600
anttccatca	gggcttaata	cttca				625

<210> 255

<211> 907

<212> DNA

<213> Homo Sapiens

<400> 255

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tggccaagcg	cgctcgggcg	tgcgacgctg	gcggggcccc	tcagctagag	cccgggctac	180
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agccctctgg	aagtgaggga	gaggatgatg	atgcggaggc	tgcttgaag	aaagaagttg	360
gtgacattaa	ggcatctaca	gagatgaggt	taagaagatt	ccagtcagtg	gaaagtggag	420
caaataacgt	tgtcttcac	aggacacttg	ggatagagcc	tgagaaattg	gtgcatcata	480

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ccatctcagg	cacatgcaag	gcttttttag	aagatatgaa	aaaatatgca	gaaacatttt	600
tggaacctcg	gtttaaagct	ccaaacaaaag	ggacatttca	gattgtgtac	aaaatctcga	660
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atcatcaaan	ctgtcngttc	cctganngtt	tgttaaagga	ttacaaggtt	ggtttannaa	840
aattcaatcn	ccaagaaggt	tggtnaanaa	nccccctaang	ggntccttca	naggcnttaa	900
ctcaaag						907

<210> 256

<211> 794

<212> DNA

<213> Homo Sapiens

<400> 256

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gacctctggg	tatcagatat	gatgtcacia	aanagagata	ttggcctttg	ttctggcagg	120
ctcctagcaa	tagaaaaagt	tttctttgaa	tttcatcatt	tacaaatctt	acaaatgcta	180
cagcatgaca	aatattagtg	aaacctgttg	actcatcatc	ctggatagag	aagctgctac	240
ttttcagtta	atgacacaaa	accttttttg	catcatatga	catatcatca	gtaaatcaac	300
ttattgagaa	taaagtctct	tcaactttgt	actgcatctt	gccccagcat	tttaattgta	360
ttagattctc	accaaccatg	catattttcc	tttcttgaga	taagttctgc	tactaaataa	420
tttgcttctt	aaaccttttg	actaaagggt	atctctgaac	aaaagcctta	ctgtttttga	480
tagtccaaaa	gccatttgaa	aataatgaat	atcctttctt	gtcaagtggc	tgtgatttat	540
tggtacaatt	gctaagtttt	gtaagttgca	tgtcacagac	aatgcacaat	gggacaagan	600
aaccttggac	ctgagtcac	ataaatatcc	cttgagaagt	tancctttcc	ttaattaaga	660
caagaatttc	ctttggtgtc	cccttggttg	cactaagtat	acttgaaagt	ntnctccagn	720
angactggaa	gttcttcaat	caaccaanct	ttttcaagaa	aatgtccngt	agtttcaang	780
gcctaaaaat	gggt					794

<210> 257

<211> 885

<212> DNA

<213> Homo Sapiens

<400> 257

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tgctggccaa	gcgcgctcgg	cgctgcgacg	ctggcgggcc	ccgtcagcta	gagcccgggc	180
tacagggcac	cctcatcacc	tgcaatatga	acgagcgcaa	gtgcgtggag	gaggcctaca	240
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agcagccctc	tggaagttag	ggagaggatg	atgatgcgga	ggctgccttg	aagaaagaag	360
ttggtgacat	taaggcatct	acagagatga	ggttaagaag	attccagtca	gtggaaaagt	420
gagcaaataa	cgttgtcttc	atcaggacac	ttgggataga	gcctgagaaa	ttggtgcatc	480
atattctcca	ggatatgtac	aaaaccaaga	aaaagaagac	tcgagttatt	ttgcgaatgt	540
tacccatctc	aggcacatgc	aaggcttttt	tagaagatat	gaaaaaatat	gcagaaacat	600
ttttggaacc	ctgggtttta	agctccaaac	aaaggacat	ttcagattgt	gtacaaatct	660
cgaaataaca	gtcatgtgaa	tngagaaaga	agttatcaga	gaaattggca	aggaatagtt	720
gtgcaccctc	aattcagaaa	attaaagggt	ggntctcaac	caatccacag	ttcacagntg	780
gtagttagaa	atcaatcaaa	acctgtcngt	ttgcccgaan	ttgnttggtta	aaagaattca	840
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<210> 258

<211> 798

<212> DNA

<213> Homo Sapiens

<400> 258

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cttcactgta	tcttcaagtt	tttgatatca	gnagcactgt	ggagaaagca	gtgtgctata	120
atgtcaacat	caggatttct	tttttttttt	ttaataacgc	aaaatgactt	atggagacaa	180
ccactgatgg	ggcaccagga	gtgtagatac	cagacctctg	gttatcagat	atgatgtcac	240
aacattatat	attggccttt	gttctggcag	gctcctagca	atagaaaaag	ttttctttga	300
atttcatcat	ttacaaatct	tacaaatgct	acagcatgac	aaatattagt	gaaacctgtt	360
gactcatcat	cctggataga	gaagctgcta	cttttcagtt	aatgacacaa	aacctttttt	420
gcatcatatg	acatatcatc	aagtaaataca	acttattgag	aataaagtct	cttcaacttt	480
gtactgcata	ttgccccagc	attttaatgt	tattaagatt	ctcaccaacc	atgcataatt	540
tcctttctctg	agataagttc	tgctactaaa	taatttgctt	cttaaaccct	ttgactaaag	600
gtgattttctg	aacaaaagcc	ttactgtttt	tgataagtcc	caaaaagcca	tttgaaaaat	660
aatgaatatc	ctttcntgtc	aagtggctgt	gaatttaattg	ttacaattgc	caagttttgt	720
aagttgcatn	gtcacangac	aatgcacaat	ggggacaagg	agaaccttgg	gcctgagtcc	780
acaataanta	ccccttga					798

<210> 259

<211> 831

<212> DNA

<213> Homo Sapiens

<400> 259

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gcgcacacca	tggcggtccc	tgcccagcag	actactcagc	ctggcggtgg	gaagcgcaaa	120
ggcaaggctc	agtatgtgct	ggccaagcgc	gctcggcgct	gcgacgttgg	cgggccccgt	180
cagctagagc	ccgggctaca	gggcatcctc	atcacctgca	atatgaacga	gcgcaagtgc	240
gtggaggagg	cctacagcct	cctcaacgaa	tacggcgacg	acatgtatgg	gccagaaaag	300
tttacagaca	aggatcagca	gccctctgga	agtgaggagg	aggatgatga	tgccggaggct	360
gccttgaaga	aagaagtggg	tgacattaag	gcatctacag	agatgagggt	aagaagattc	420
cagtcagtgg	aaagtggagc	aaataacggt	gtcttcatca	ggacacttgg	gatanagcct	480
gagaaattgg	tgcatcatat	tctccaggat	atgtacaaaa	ccaagaaaaa	gaagactcga	540
gttattttgc	gaatgttacc	catctcagge	acatgcaang	ctttttttaga	agatatgaaa	600
aaatatgcan	aaacatTTTT	ggaancctgg	tttaaagctc	caaacaaagg	gacattttcag	660
attgtgttca	aatctcgaaa	ataacagtca	tgttgaatag	aagaagaagt	tatcagagaa	720
nttggaagg	aataatgntg	caacctcaat	tcagaaaata	aaagtggatt	tcaccaattc	780
cacagtncac	aantggtagt	agaaatcatc	aaaagctntc	tgtttgcccg	a	831

<210> 260

<211> 772

<212> DNA

<213> Homo Sapiens

<400> 260

aataacgcaa	aatgacttat	ggagacaacc	actgatgggg	caccaggagt	gtagataacca	60
gacctctggt	tatcagatat	gatgtcacia	cattatatat	tggcctttgt	tctggcaggc	120
tcctagcaat	agaaaaagtt	ttctttgaat	ttcatcattt	acaaatctta	caaatgctac	180
agcatgacaa	atattagtga	aacctgttga	ctcatcatcc	tggatagaga	agctgctact	240
tttcagttaa	tgacacaaaa	ccttttttgc	atcatatgac	atatcatcag	taaatcaact	300
tattgagaat	aaagtctctt	caacttttga	ctgcatcttg	ccccagcatt	ttaatgttat	360
tagattctca	ccaacctatgc	atattttcct	ttcctgagat	aagttctgct	actaaataat	420
ttgcttctta	aaccttttga	ctaaagggtga	tttctgaaca	aaagccttac	tgtttttgat	480
agtccaaaag	ccattttgaaa	ataatgaata	tccttttcttg	tcaagtggcn	gtgattttatt	540
gttacaattg	ctagttttgt	nagttgcatg	tcacagacaa	tgcacaatgg	gacangagag	600

cctgggactg	agtccacata	ataccctntga	gaagtannct	ttcttttatta	agacagaant	660
tctttgtgtc	ccttggttgc	caagtntact	gaagtntcnc	aagaaggact	ggaagtntc	720
ataancaacc	ttttagaaat	gtccgtattc	ctaaggccca	aaaangggtc	cc	772

<210> 261

<211> 753

<212> DNA

<213> Homo Sapiens

<400> 261

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atggcgggcc	ctgcccagca	gactactcag	cctggcgggc	ggaagcgcaa	aggcaaggct	120
cagtatgtgc	tggccaagcg	cgctcggcgc	tgcgacgctg	gcgggccccg	tcagctagag	180
cccgggctac	agggcatcct	catcacctgc	aatatgaacg	agcgcaagtg	cgtggaggag	240
gcctacagcc	tcctcaacga	atacggcgac	gacatgtatg	ggccagaaaa	gtttacagac	300
aaggatcagc	agccctcttg	aagtgaggga	gaggatgatg	atgcggaggc	tgccctgaag	360
aaagaagttg	gtgacattaa	ggcatctaca	gagatgaggt	taagaagatt	ccagtcagtg	420
gaaagtggag	caaataacgt	tgtcttcctc	aggacacttg	ggatagagcc	tgagaaattg	480
gtgcatcata	ttctccagga	tatgtacaaa	accaagaaaa	agaagactcg	agttattttg	540
cgaatgttac	ccatctcagg	cacatgcaag	gcttttttag	aaagatatga	anaaatatgc	600
anaaaacatt	tttggaaacc	tgggtttaaa	gctccaaaac	aagggaacatt	tcagaattgt	660
ggtacaaatc	tcgaaatanc	agtcatgtta	antagagaan	naagtttttc	agaagaattt	720
ggcaaggaat	nagtnntgca	accctcaatt	tca			753

<210> 262

<211> 659

<212> DNA

<213> Homo Sapiens

<400> 262

aataacgcaa	aatgacttat	ggagacaacc	actgatgggg	caccaggagt	gtagatacca	60
gacctctggt	tatcagatat	gatgtcacia	cattatatat	tggcctttgt	tctggcaggc	120
tcctagcaat	agaaaaagtt	ttctttgaat	ttcatcattt	acaaatctta	caaattgctac	180
agcatgacaa	atattagtga	aacctgttga	ctcatcatcc	tggatagaga	agctgctact	240
tttcagttaa	tgacacaaaa	ccttttttgc	atcatatgac	atatcatcag	taaatcaact	300
tattgagaat	aaagtctctt	caacttttga	ctgcatcttg	ccccagcatt	ttaatgttat	360
tagattctca	ccangccatg	catattttcc	tttcttgaga	taagttctgc	tactaaagaa	420
tttgcttctt	aaaccttttg	actaaagggt	atctctgaac	aaaagcctta	ctgtttttga	480
nnagtcana	agccatttga	aaaataatga	atatectttc	cttgtaaggt	ggcngtgatt	540
tantgttaca	atttgcnagg	ttttgtaagt	tgcatggtca	cagnanaatg	cacantnggg	600
acannagan	cntgggncng	aagtcacat	tatanccctt	tgagnaangt	agctttccc	659

<210> 263

<211> 673

<212> DNA

<213> Homo Sapiens

<400> 263

gagattttga	tcacggtaac	cgatcagaat	gacaacaagc	ccgaattcac	ccaggagggtc	60
tttaaggggt	ctgtcatgga	aggtgctctt	ccaggaaacct	ctgtgatgga	ggtcacagcc	120
acagacgcgg	acgatgatgt	gaacacctac	aatgccgcca	tcgcttacac	catcctcagc	180
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agtgtggtca	ccactgggct	ggaccgagag	agtttcccta	cgtataccct	gggtggtcaa	300
gctgctgacc	ttcaagggtga	gggggttaagc	acaacagcaa	cagctgtgat	cacagtcact	360
gacaccaacg	ataatcctcc	gatcttcaat	cccaccacgt	acaagggtca	gggtgcctgaa	420

aacgagggcta	acgtcgtaat	caccacactg	aaagtgactg	atgctgatgc	ccccaatacc	480
ccagcgttgg	gaggctgtat	acaccatatt	gaatgatgat	gggtgggacaa	tttgtcgtca	540
ccacaaatcc	agtgaacaac	gatggcattt	tgaaaaacag	caaagttgaa	gtcaagtgat	600
tttgtcgttt	cngaatacaat	tgttgccctn	gttggggagaa	aggntntccaa	cacataccccc	660
gggattngtt	att					673

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<210> 264
<211> 661
<212> DNA
<213> Homo Sapiens
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<400> 264						
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acctccaact	gcattctccta	ctctgaaatn	cctcttgagc	agccaagggt	ggccagttct	120
gtccttcatt	ttcctgaaga	anaatctcag	cctgaaagaa	tatagagcta	ggtgacatat	180
gggtggccaa	ccgctttctcc	tcaagttcca	anagagtggg	caattagtga	aattccatca	240
gtcatgttaa	aatatacttt	caccagggtan	acatccttct	ttcaatgcta	gaggacagtg	300
aaaaatgtag	attaatgaga	tctgtaactg	tcttctctta	actgtacacc	cctcaggctg	360
aacgcgggag	tgctgaacac	atgccctcgg	aaggggacct	gaagacccaa	gtgacctgca	420
ccataaaaacc	accccgaggg	tcagccatgc	tgccagcact	caagaagcag	cagggccacc	480
tgctggaaaa	ctgggcacgg	ctctgggtgc	ctggccctgc	ctgcctcctc	cacgtccttg	540
gagccaggtc	tacggcaggg	aacatgatct	tcttctccag	cttctgtgga	aggaacanga	600
aatttttcat	gatgtcntcc	agctcttcta	nggccaaactg	ggcatgganc	ttggccacgt	660
c						661

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<210> 265
<211> 659
<212> DNA
<213> Homo. Sapiens
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<400> 265						
ccatccaana	taacttttatt	ccatttttgca	ttattttgata	actattttcct	tccccctcccc	60
acctccaact	gcattctccta	ctctgaaatg	cctcttgagc	agccaagggt	ggccagttct	120
gctcctcatt	ttcctgaana	anaatctcag	cctgaaagaa	tatanagcta	ggtgacatat	180
gggtggccaa	ccgctttctcc	tcaagttcca	ananagtggg	caattagtga	aattccatca	240
gtcatgttaa	aatatacttt	caccagggtan	acatccttct	ttcaatgcta	gaggacagtg	300
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aacgcgggag	tgctgaacac	atgccctcgg	aagggacct	gaagacccaa	gtgacctgca	420
ccataaaacc	accccgaggg	tcagccatgc	tgccagcact	caaaaagcag	cagggccacc	480
tgctggaana	actgggcacg	gctctgggtg	cctggccctg	ctgcctcct	ccacgtcctt	540
ggaaccagg	ctacggcnag	accatgatct	tcttctccan	cttctgtgga	aggaacanga	600
antttttcat	gatgtcntcc	actcttctag	ggccaactgg	gcattggactt	ggccacgtc	659

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<210> 266
<211> 620
<212> DNA
<213> Homo Sapiens
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<400> 266						
ccatccaaga	taacttttatt	ccatttttgca	ttattttgata	actattttcct	tccccctccc	60
acctccaact	gcattctcta	ttntnaaatg	cctcttgagc	agccaagggt	ggccagttct	120
gctcctcatt	ttcctgaana	anaatctcag	cctgaaagaa	tatagagcta	ggtgacatat	180
gggtggccaa	ccgcttctcc	tcaagttcca	ananagtggg	caattagtga	aattccatca	240
gtcatgttaa	aatatacttt	caccagggtan	acatccttct	ttcaatgcta	gaggacagtg	300
aaaaatgtag	attaatgaga	tctgtaactg	tcttctctta	actgtacacc	cctcaggctg	360

aacgcgggag	tgctgaacac	atgccctcgg	aagggaccct	gaagacccaa	gtgacctgca	420
ccataaaaacc	accccgaggg	tcagccatgc	tgccagcact	caagaagcag	cagggccacc	480
tgctggaaga	cctgggcacg	gctctgggtg	cctggccctg	cctgcctcct	ccacgtcctt	540
ggagccaggt	ctacngcang	aacatgatct	tcttctccac	ttctgtggaa	ggaacaggaa	600
ntttttcatg	atgtcatcca					620

<210> 267

<211> 745

<212> DNA

<213> Homo Sapiens

<400> 267

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gcactactac	aagtcagaaa	tctggaagcg	taaccacaga	acagctccaa	gagggttcttt	120
tgtcagctta	tgacctcaa	attccaacac	gggctgctgc	cctgcgtact	ctttcccact	180
ggatagagca	gagagaagca	aaagcccttg	agatgcaaga	gaagcttctc	aagatattct	240
tggaaaactt	ggaacatgaa	gacacttttg	tatatctatc	tgcaattcag	ggggttgccc	300
tgctgtcaga	cgtctatcct	gagaaaatct	tgccggactt	gttggctcaa	tatgacagca	360
gcaaagacaa	gcacacacca	gagaccaaga	atgaaagtcg	gggaagtcct	tatgcgaatc	420
gtcagggcat	taggagacat	ggtctcaaag	taccgagaac	ctttgatcca	taccttcttg	480
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ctgtgccaga	ggctggactt	tctgctgggc	tccgtggtcc	atgaggtaac	agcttgccctg	600
attgctgtgg	ccaaaaacat	tntntgaaag	ttcaagttcg	cannagctgg	ccaanacaat	660
gtggggttgt	gcctgcnngc	tttcggggga	actcaaccca	agaaaaagct	tantgtaagg	720
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<210> 268

<211> 676

<212> DNA

<213> Homo Sapiens

<400> 268

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gctctctcatt	ttcctgaana	anaatctcag	cctgaaagaa	tatagagcta	ggtgacatat	180
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tgctggaana	cctgggcacg	gctctgggtg	cctggccctg	cctgcctcct	ccacgtcctt	540
gggagccagg	tctacggcag	ggaacatgat	cttcttctcc	agcttctgtg	gaaggaaacag	600
gaagtttttc	atgatgtcat	ccanctcttc	taaggccaac	tgggcatgga	acttggccac	660
gtcatcgggc	tccaaa					676

<210> 269

<211> 737

<212> DNA

<213> Homo Sapiens

<400> 269

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cctgttggtg	tctttattat	tgaaagagaa	acaggatggc	tgaagctctt	ctctcacgct	120
gtgtcatcca	acgggaatgc	agttgaggat	ccaatggaga	ttttgatcac	ggtaaccgat	180
cagaatgaca	acaagcccga	attcaccacg	gaggtcttta	aggggtctgt	catggaaggt	240

gctcttccag	gaacctctgt	gatggaggtc	acagccacag	acgcggacga	tgatgtgaac	300
acctacaatg	cgccatcgc	ttacaccatc	ctcagccaag	atcctgagct	ccctgacaaa	360
aatatgttca	ccattaacag	gaacacagga	gtcatcagtg	tggtcaccac	tggtcaggac	420
cgagagagtt	tcctacgta	taccctgggt	gttcaagctg	ctgaccttca	aggtgagggg	480
ttaagcacia	cagcaacagc	tgtgatcaca	gtcactgaca	ccaacgataa	tcctccgata	540
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caacactgaa	aagtgactga	tgcttgatgc	cccccaatta	ncccanccgt	gggaagctgt	660
ntacaccata	tngaaatgat	gatgggtggg	cnaatttgn	cgttcaccaa	caaattccan	720
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<210> 270

<211> 726

<212> DNA

<213> Homo Sapiens

<400> 270

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gctcctcatt	ttcctgaana	anaatctcag	cctgaaagaa	tatanagcta	ggtgacatat	180
gggtggccaa	cgctttctcc	tcaagttcca	ananagtggg	caattagtga	aattccatca	240
gtcatgttaa	aatatacttt	caccaggtan	acatccttct	ttcaatgcta	gaggacagtg	300
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tgctggaana	cctgggcacg	gctctgggtg	cctggccctg	cctgcctcct	ccacgtcctt	540
ggagccaggt	ctacggcagg	aacatgatct	tcttctccac	ttctgtggaa	ggaacangaa	600
atctttcatg	atgtctccan	ctcttctagg	gccactgggc	atggancttg	ggcnctcat	660
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<210> 271

<211> 814

<212> DNA

<213> Homo Sapiens

<400> 271

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gctcctcatt	ttcctgaaga	agaatctcag	cctgaaagaa	tatagagcta	ggtgacatat	180
gggtggccaa	cgctttctcc	tcaagttcca	agagagtggg	caattagtga	aattccatca	240
gtcatgttaa	aatatacttt	caccaggtag	acatccttct	ttcaatgcta	gaggacagtg	300
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gaagtttttc	aatgatgtca	tccagctctt	cctanggccca	actgggcaag	ggagcttggg	660
caacgtcatc	ggggctccag	acaaaactac	gtgcttcanc	aanggtggta	aaanctcctt	720
gaaggacggg	ggctcaacaa	ccaagtanc	ctttccnggg	ctgaatcccc	ngaagcaagc	780
aagnacaaac	cacatgtttt	gggaagctcc	ggcg			814

<210> 272

<211> 862

<212> DNA

<213> Homo Sapiens

<400> 272

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cccagacagg	cctgcagtca	aatgctccaa	tcattcctca	aggagtcaat	gagcccagca	180
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tgtcagacgt	ctatcctgag	aaaatcttgc	cggacttggt	ggctcaatat	gacagcagca	480
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ccaatacaat	gttgggttgt	tgccnggctg	gnnttcgggg	ggaatcaagc	ccaggaaaaag	840
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<210> 273

<211> 677

<212> DNA

<213> Homo Sapiens

<400> 273

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gctcctcatt	ttcctgaaga	agaatctcag	cctgaaagaa	tatagagcta	ggtgacatat	180
gggtggccaa	ccgcttctcc	tcaagttcca	agagagtggg	caattagtga	aattccatca	240
gtcatgttaa	aatatacttt	caccagggtan	acatccttct	ttcaatgcta	gaggacagtg	300
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ccataaaacc	accccgaggg	tcagccatgc	tgccaagcac	tcaagaggca	gcagggccac	480
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aaaaaaggaa	ntttttcaag	gnngtcatcc	nangetcttc	caaggggnca	aaatggggggc	660
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<210> 274

<211> 863

<212> DNA

<213> Homo Sapiens

<400> 274

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catcaccatc	tctacccatg	gagcctttgc	cactgaggcc	gtcagcatgg	ctgcccacaa	180
tactactgaac	agaaaagatc	tggaagggaa	aatagaagag	cagcaacaaa	ccagtcattga	240
aagaccact	gatgtagctc	atagccacct	tgaacaacag	cagagccatg	agacagcccc	300
ccagacaggc	ctgcagtcaa	atgctccaat	cattcctcaa	ggagtcaatg	agcccagcac	360
tactacaagt	cagaaatctg	gaagcgtaac	cacagaacag	ctccaagagg	ttcttttgtc	420
agcttatgac	cctcaaattc	caacacgggc	tgctgccctg	cgtactcttt	cccactggat	480
agagcagaga	gaagcaaaa	cccttgagat	gcaagagaag	cttctcaaga	tattcttgga	540
aaacttgga	catgaagaca	cttttgtata	tctatctgca	attcaggggg	ttgccctgct	600
gtcagacgtc	tactctgaga	aaatcttgcc	ggacttggtg	gctcaatatg	acagcagcaa	660
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anggcattag	ggagacatgg	tctcaaagta	accgagaacc	tttgattcat	accttctctga	780

aggggaatta gagattctga atggtgctca cagggccaac aaccttggcn aaccttgggg 840
aacctgtgcc anaaggctng gac 863

<210> 275

<211> 821

<212> DNA

<213> Homo Sapiens

<400> 275

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gctcctcatt	ttcctgaaga	agaatctcag	cctgaaagaa	tatagagcta	ggtgacatat	180
gggtggccaa	ccgcttctcc	tcaagttcca	agagagtggg	caattagtga	aattccatca	240
gtcatgttaa	aatatacttt	caccaggtag	acatccttct	ttcaatgcta	gaggacagtg	300
aaaaatgtag	attaatgaga	tctgtaactg	tcttctctta	actgtacacc	cctcaggctg	360
aacgcgggag	tgctgaacac	atgccctcgg	aagggacctt	gaagacccaa	gtgacctgca	420
ccataaaacc	accccgaggg	tcagccatgc	tgccagcact	caagaggcag	cagggccacc	480
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gtcatcgggc	tccagacaca	ctacgtgctt	cancaagggtg	gtaaaagatt	cttganggac	720
ggngctcanc	acctcagtaa	nctttctggc	tgagtcccc	gaaagcaaca	gcacaancca	780
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<210> 276

<211> 722

<212> DNA

<213> Homo Sapiens

<400> 276

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gtacaagggg	caggtgcctg	agaacgaggc	taacgtcgta	atcaccacac	tgaaagtga	120
tgatgctgat	gcccccaata	ccccagcggtg	ggaggctgta	tacaccatat	tgaaatgatga	180
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aaagttgaag	tcaagtgaat	ttgctgttct	gaagcagttg	ttgcctctgt	tgagagaagg	300
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cagaaaagat	ctggaaggga	aaatagaaga	gcagcaacaa	accagtcag	aaagaccac	480
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gcctgcagtc	aaatgctcca	atcattcctc	aaggagccta	tgagcccagc	actactacaa	600
gtcagaaaatc	tggaagcggt	accacagaac	agctccaaga	ggttcntttg	tcagctttat	660
gaacctcaaa	ttccaacacg	gggctgggtg	ctgcgttact	cnttcccact	gggntagaag	720
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<210> 277

<211> 805

<212> DNA

<213> Homo Sapiens

<400> 277

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gctcctcatt	ttcctgaaga	agaatctcag	cctgaaagaa	tatagagcta	ggtgacatat	180
gggtggccaa	ccgcttctcc	tcaagttcca	agagagtggg	caattagtga	aattccatca	240
gtcatgttaa	aatatacttt	caccaggtag	acatccttct	ttcaatgcta	gaggacagtg	300

aaaaatgtag	attaatgaga	tctgtaactg	tcttctctta	actgtacacc	cctcaggctg	360
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ttggagccaa	ggctctacggc	aggaccatga	tcttcttctc	cagcttctgt	ggaggggaaca	600
ngaagttttt	caagatgtca	tccaactcct	ccaagggcca	actggggcat	gggagccttg	660
gcacgtcatn	cgggctccag	acacactacg	gtgcttcaac	aagggnggta	nagattcttg	720
anggacgggg	ctcaaacaat	gaacctcant	tacctttcng	gctgagtcct	cnaaagcaac	780
aagtacaaac	cacatgtttt	gggaa				805

<210> 278

<211> 1358

<212> DNA

<213> Homo Sapiens

<400> 278

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tggtggtctt	ggtctgcctc	cagctcttgg	aggcagcagt	ggtcaaagtg	cccctgaaga	120
aatttaaagtc	tatccgtgag	accatgaagg	agaagggtct	gctgggggag	ttcctgagga	180
cccacaagta	tgatcctgct	tgggaagtacc	gctttgggtga	cctcagcgtg	acctacgagc	240
ccatggccta	catggatgct	gcctactttg	gtgagatcag	catcgggact	ccacccaga	300
acttctgtgt	cctttttgac	accggctcct	ccaacttggt	ggtgccctct	gtctactgcc	360
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ccaatgggca	aacctttctc	ctgcagtatg	gcagtggcag	cctcacccgc	ttctttggct	480
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<210> 279

<211> 702

<212> DNA

<213> Homo Sapiens

<400> 279

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attttatatc	tgcaaaagca	attagacgct	accactgatg	aaaagaagga	aacagttact	180
caactccaaa	atatcattga	ggctaattct	cagcattacc	aaaaaaatat	taatagtttg	240
caggaagagc	ttttacagtt	gaaagctata	caccaagaag	aggtgaaaga	gttgatgtgc	300
cagattgaag	catcagctaa	ggaacatgaa	gcagagataa	ataagttgaa	cgagctaaaa	360
gagaacttag	taaaacaatg	tgaggcaagt	gaaaagaaca	tccagaagaa	atatgaatgt	420
gagttagaaa	atttaaggaa	agccacctca	aatgcaaacc	aagacaatca	gatatgttct	480
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agaagatacc	ttaaaaagaa	cttgaatctc	aacacagtat	cttaaaaaga	tgagggtaac	600
ttatatgaat	aatccttaag	tttaaaactt	gaaaatggga	tgctcaacc	attttaaagg	660
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<210> 280

<211> 874

<212> DNA

<213> Homo Sapiens

<400> 280

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agaatagttg	ggcattttaa	taaaattttg	taaatgaatg	aaaaatccaa	aataaatcat	180
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gaaagagaag	gcaaacaggt	gttagagggg	caagaatgtg	agctcgagga	aaagacagct	300
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ctaagaagaa	tctgtcta	taattgtgac	aacatctgca	aaaccatagt	tacctatttt	420
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aaganaaaca	acctgaaaca	ttaaatacat	ntttataagg	aaaaantaaa	tgaattttta	780
tcttaatttt	aaanaaaaac	cnaaaatttt	nncatacccc	cccgtcttta	cttaaaaaant	840
gncttaccaa	aataactaanc	ctttcccaaa	aacc			874

<210> 281

<211> 730

<212> DNA

<213> Homo Sapiens

<400> 281

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cacaaccact	ggtgtctcct	gtttgaacac	tccgtcttga	aantcngtcc	ntcctgnata	720
ttaaagggtg						730

<210> 282

<211> 699

<212> DNA

<213> Homo Sapiens

<400> 282

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aatttaagtc	tatccgtgag	accatgaagg	agaagggtct	gctgggggag	ttcctgagga	180

cccacaagta	tgatcctgct	tggaagtacc	gctttggtga	cctcagcgtg	acctacgagc	240
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taacctggct	ctgtcccgtt	ggattaaggc	caccacaagc	tatntagggc	nattnggntc	660
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<210> 283

<211> 759

<212> DNA

<213> Homo Sapiens

<400> 283

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catgtttacat	tactgggtcc	accattttgt	aatatgttgc	acaagtttta	gtccttgctc	720
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<210> 284

<211> 764

<212> DNA

<213> Homo Sapiens

<400> 284

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aaggaaatac	agatgaagag	gactgcaata	gaaagctttt	aatgaaaaca	ttaaaatatt	660
tgggaagagca	ntgtcacaca	caaggaacca	acattnccaa	agaatatatt	gagnngattt	720
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<210> 285

<211> 586

<212> DNA

<213> Homo Sapiens

<400> 285
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atccccacaa aaagaatgct attccnctc tcagagaaac aggcaggaag gacanaaggg 180
gttagttaca gtgatcaatt tttagcgtttg ctaaaacnca caaattcnag nctttttaag 240
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gtttttttta acanctnggc tttaaattatt taaatgaaan cccaagcctc ccnatttncc 480
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nggggggaaa aaananactg ccaaangcaa aaacaaaaac ncccaa 586

<210> 286
<211> 666
<212> DNA
<213> Homo Sapiens

<400> 286
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ggacggaaaa gaaaagttga ttacaaacgg gaccatattt tgcttcgaaa tggaccagc 120
agtttagcgag ccaatgagag accaagtgcg acggactcat ttgacagagg acactcccaa 180
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caatgtattt gatatccagc aagggtttga taatccccag gtgcggttct tctgggtga 360
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tgctgcacc ccaccatcca gtaacaacaa ggagctcttt tatagaagtg aattacattg 480
gcaccaagaa tgtcattgaa acttgcaaag aggtctgggt tcagaaactc attttaacca 540
gcagtgccat gtcattcttg agggcgctga tatcaagaat ggaactgaaa gaccttcctt 600
nagccattga aaccaattga cctactacac aaganactaa agatcttaca ngagaaggca 660
atttct 666

<210> 287
<211> 782
<212> DNA
<213> Homo Sapiens

<400> 287
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catgaaggaa gaaatgtctg tttttgccgc cctcatcgtc acggaaagag taggggtgcg 120
tctctgccta gcagaaggag tcacaggctc agagcaaact cattcaaagg atgttatttc 180
atcaatccac aggggaagga gtgactggct gagcaacgtg tcgagagagc ccagcctcca 240
gtgtccctca cttgacctc cgcagggtggc gaaagctctg cacgggtctc tccatagcat 300
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gaaagtccac caagtctctc ccaatttcca atcacgaaac ttcaacctg ccgttctctg 720
ctgcctccat gaaggatggg ttacaaactg ccgggttccc tttggggccg aaaaattgcc 780
aa 782

<210> 288
<211> 707
<212> DNA

<213> Homo Sapiens

<400> 288

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accaagtaga	atatgctttt	aaggctatta	accaggggtg	ccttacatca	gtagctgtca	120
gagggaaaga	ctgtgcagta	attgtcacac	agaagaaagt	acctgacaaa	ttattggatt	180
ccagcacagt	gactcactta	ttcaagataa	ctgaaaacat	tggttgtgtg	atgaccggaa	240
tgacagctga	cagcagatcc	caggtacaga	gggcacgcta	tgaggcagct	aactggaaat	300
acaagtatgg	ctatgagatt	cctgtggaca	tgctgtgtaa	aagaattgcc	gatatttctc	360
aggtctacac	acagaatgct	gaaatgaggc	ctcttggttg	ttgtatgatt	ttaattggta	420
tagatgaaga	gcaaggccct	caggtatata	agtgtgatcc	tgagggttac	tactgtgggt	480
ttaaagccac	tgcagcggga	gttaaacaaa	ctgagtcaac	cagcttcctt	gaaaaaaaaag	540
tgaagaagaa	atattgattg	acatttgaac	agacagtggg	aactgcaatt	acatgcctgt	600
ctactgttcc	atcaattgan	ttcaaacctt	cagaaataga	aattgggagt	aatgacagtt	660
gaaaatccta	aattcangan	tcctacagaa	gcagagattg	atgctca		707

<210> 289

<211> 673

<212> DNA

<213> Homo Sapiens

<400> 289

atggcaccat	cacaacaaag	gaacttggaa	ctgtcatgag	gtcactgggt	cagaacccaa	60
cagaagctga	attgcaggat	atgatcaatg	aagtggatgc	tgatggtaat	ggcaccattg	120
acttccccnn	atttttgact	atgatggcta	gaaaaatgaa	agatacagat	agtgaagaag	180
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aactacgtca	cgtcatgaca	aacttaggag	aaaaactaac	agatgaagaa	gtagatgaaa	300
tgatcagaga	agcagatatt	gatggagacg	gacaagtcaa	ctatgaagaa	ttcgtacaga	360
tgatgactgc	aaaatgaaga	cctactttca	actccttttt	ccccctcta	gaagaatcaa	420
attgaatctt	ttacttacct	cttgcaaaaa	aaaaaaaaaat	aagncanaaa	annnataaaa	480
aaaaaaaaacnc	gagagtactt	ctaaagcggc	cgcgggccna	tcgattttcc	acccgggtgg	540
ggtaccaggt	aagtgtccca	attcgcccta	taggggagtc	gtattacaat	tcacggggcc	600
gtcgttttta	aaacgtcntg	acgggggaaa	accctggngt	taccaactta	atcccccttg	660
caacaaatnc	ccc					673

<210> 290

<211> 573

<212> DNA

<213> Homo Sapiens

<400> 290

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ccatcaatat	ctgcttcnct	gatcatttca	tctacttctt	catctgtag	tttttcnecn	180
aagtttgtca	tgacgtgacg	tagttctgct	gcactgatat	aaccattgcc	atccttgtca	240
aagactcgga	atgcctcagc	gatttcttct	tcactatctg	tatctttcan	ttttcnagcc	300
atcatagtca	aaaattcggg	gaantcaatg	gngccattac	catcagcatc	cacttcattg	360
atcatatcct	gnaattcaan	cttctgttgg	gtntgaccc	antgaccnca	nggacaagtt	420
ccaagttccc	tttggttgtg	aagggtgcca	nctcgtgccc	gaattccttt	gggntccnac	480
gangggtcna	accctgcana	ggngccgcga	ancctccaan	cttttggttc	ccctttanat	540
ngaggggttaa	atttcgaact	ttggnttttt	tcc			573

<210> 291

<211> 819

<212> DNA

<213> Homo Sapiens

<400> 291

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gagtggaaag	acagatacaa	tgccctagga	gggtgcaggg	tcaagaggaa	gaggggagcc	120
cacgtgtcga	ggcagcaagt	ctaggcggca	gtggcaaagc	ctactctgtt	gttgcccaag	180
tcgtagacgg	aatagtagga	cctgaggaag	acatccccga	ggatccacag	gggctggccg	240
ttctgggagg	acaggtaggt	gggctcgact	cccacggtgc	agtagccgtt	gttactgagg	300
atataggagg	aaggtggcag	agggaactcc	acaccattga	tgatgaaggt	caagctgggc	360
agattctgaa	tgtctgttaca	gttcacgaga	aactgtccat	actcaccctc	ctgggcccct	420
gtggcctgca	gaagagcact	catgtactgc	tggggcacag	tgagcagaga	ggtgcctgtg	480
tccacgatgg	cctggcaacc	ctcagaacac	cagccggagg	cctggccgcc	gatgaggaac	540
tcttcaatgc	caatctgcca	gtagagtcc	tgggtgacan	gcgcccagta	gatctgcccc	600
gtgtacangc	tgtatccac	acccccaaag	gacaaccgct	cccccgctgg	gagccctgct	660
ggttgctgan	gtaaaccctg	aanacggggc	tgggttnaggg	cgccctcctg	cacatgcct	720
gcatactgtg	gtggcctcat	ccacggnena	aaccanggta	aggcaaggcc	catgatgcca	780
tcaaactgcc	ataacaaatt	tgtacaaggc	tcaatccca			819

<210> 292

<211> 664

<212> DNA

<213> Homo Sapiens

<400> 292

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tccaagatct	gtgccaatgt	gtttttgtgga	gccggccggg	aatgtgcagt	cacagagaaa	120
ggggaaccca	cctgtctctg	cattgagcaa	tgcaaaccctc	acaagaggcc	tgtgtgtggc	180
agtaatggca	agacctacct	caaccactgt	gaactgcctc	gagatgcctg	cctcactgga	240
tccaaaatcc	agggttgatta	cgatggacac	tgcaaagaga	agaaatccgt	aagtccatct	300
gccagcccg	ttgtttgcta	tcagtccaac	cgtgatgagc	tccgacgtcg	catcatccaa	360
tggctggaan	ctgagatcat	tccagatggc	tggttctcta	aaggcagcaa	ctacagtga	420
atcctagaca	agtatttttaa	agaactttga	taatggtgat	tctcgccctg	actccaagt	480
aattcctgaa	gtttgtggga	acangaatga	aactgccctc	aatattacaa	cgtttcagn	540
accaagggag	aacaacaagt	ttgcctaang	ggactccggt	ngttgatgcc	tctcaatttg	600
aactggctcg	gatgaaaaat	gcctgattgg	gnaattnaag	cttcccaant	agtttcncca	660
aatg						664

<210> 293

<211> 719

<212> DNA

<213> Homo Sapiens

<400> 293

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caagttaaag	gcaatatana	agcctactaa	atacaaatac	aagttcacaa	acacatatgc	120
aacagaaact	tgtttanatt	gtttcttgaa	gtttgactac	ttaaaaaacat	aggtgtaaag	180
gaaagacatt	cagactgggc	cacgtgggct	tgttagcagg	canaggaacc	ctgctttcca	240
aaaactgata	tagtccaaag	tcacggcatg	tgggaatgtt	tccatggaca	ctggatctta	300
acagatgcta	tagtgtttac	aaaactacac	acacagagaa	agcccaagga	agcctgcagg	360
ctaagcccta	tgtttttaga	gggctgaagg	aaccaaaccct	agtttaatcc	tgtttgtttg	420
ctccatgcaa	aactttatgg	aagactcccc	agactaggct	atttagcagc	ttccatgaat	480
ggctcctcaga	tcatgtgatt	ctacggcata	nacgacagct	gccctattta	cacagaagct	540
gcagaactca	agaagaatgt	ggatttgctc	ttggganttc	aatgttgagc	ggtanantaa	600
tcttgggatg	ataaccatgt	tctaaatgac	tagtgaanaa	acctgtgggt	tcttgctttt	660
aacaaattgg	tgtactcttg	cccctcccat	aatgtccaag	ggctgggtaa	aacctttga	719

<400> 294

<210> 295

<400> 295

<210> 296

<400> 296

aaaagttant cttgggntga ataaccaggt ttctaaaatg accaaattga aa

652

<210> 297

<211> 879

<212> DNA

<213> Homo Sapiens

<400> 297

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caagttaaat	gcaatataga	agcctactaa	atacaaatac	aagttcacaa	acacatatgc	120
aacagaaact	tgtttagatt	gtttcttgaa	gtttgactac	ttaaaaacat	aggtgtaaag	180
gaaagacatt	cagactgggc	cacgtgggct	tgtttagcagg	cagaggaacc	ctgctttcca	240
aaaactgata	tagtccagag	tcacggcatg	tggaatgtt	tccatggaca	ctggatctta	300
acagatgcta	tagtgtttac	aaanctacac	acacagagaa	agcccaagga	agcctgcagg	360
ctaagcccta	tgcttttaga	gggctgaagg	aaccaaacct	agtttaatcc	tgtttggttg	420
ctccatgcaa	aactttatgg	aagactcccc	agactaggct	atttagcagc	ttccatgaat	480
ggtcctcaga	tcatgtgatt	ctacggcata	gacgacagct	gccctattta	cacagaagct	540
gcagaactca	agaggaatgt	ggatttgctc	ttgggagttc	aatgttgacg	ggtagaagta	600
gtcctggatg	ataaccatgt	tcnnaaatga	ctagtgaaga	gacactgtgg	tttctgcct	660
ttaacaaant	gggtgactcc	ttgccctcct	ccaatantgt	ccaaagggct	ggtaaaaacc	720
ctttgattaa	aggcgtgctg	cctgttgagt	tccccaangg	nacttgggac	anggganccg	780
catttcaaga	ccggaacaaa	ttgggagttt	tgaaaaaagt	ttttaaatng	ggaatggggt	840
acataaaaaa	gcttgaaatg	gctaaaacaa	aggngggaa			879

<210> 298

<211> 697

<212> DNA

<213> Homo Sapiens

<400> 298

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gtgaaaacaa	ctatggaaaag	tatatctaata	acgtctacgc	agtctctcac	agcagaaaca	120
aaggacatag	ctttggaacc	taaggaacaa	aaacatgaag	acaggcagag	caatacacct	180
tctcctcctg	ttagtacctt	ttcatcaggt	acttctacca	ccagtgatat	tgaagtttta	240
gatcatgaaa	gtgtaataag	tgagagctca	gcgagctcga	gacaagagac	tacagattca	300
aaatcaagtc	ttcacttgat	gcagacatct	tttcagcttc	tctctgcac	tgcttgctct	360
gaatataatc	gtttagatga	tttccaaaaa	ctcactgaga	gttgctgttc	atctgatgct	420
tttgaagaa	tagactcatt	tagtgtacag	tcattagata	gccggagtgt	aagtgaatc	480
aattcaagat	gatgaattgt	caggcaagg	gatatgcttt	agtgcctatt	ataagttaat	540
tcttcaactc	caaaagtcta	aaacagttga	atctgccgaa	ggaaaatctg	aagaagtaaa	600
tgaacatta	agttatacca	ctgaggaagc	agaaatggga	agaaaagtgg	gcgaaagtgg	660
caactccccg	gttaacngng	aaaangcctg	gatatcc			697

<210> 299

<211> 510

<212> DNA

<213> Homo Sapiens

<400> 299

aaanaatnaa	ttatgttaan	aactttatta	ttttcnante	cttttaaang	gntgtnaaat	60
aatacttctt	ccaaatcttt	taaatgttnt	naangccttt	gcnaaatcct	tataaataaa	120
ttttcnccct	tatccaancn	catcnanaaa	acattgaata	tgttcagggt	tcncnggann	180
ggtncnnaaa	ggnnccnctt	tttatacnga	cttaattgtn	aaagcngggg	gaaataaatt	240
ttccnatcna	aatttttttt	aagtttaaat	cnttccnctt	ttaaatttcn	nanagtgtcc	300
gtgtnactcc	tactttttaa	ggaaaaaaat	tanttttaaa	tttaatancc	cccgatntaa	360

taattttttta	ctttaacnnc	taatgttcnt	tttcctgaac	nntaattaan	aatgtttgaa	420
atttttaaatg	tnaaanantc	caantttccg	tntgttaaca	ttacnctcc	aatgttcnta	480
atataatntnt	taaccctnnc	caattatnga				510

<210> 300
 <211> 625
 <212> DNA
 <213> Homo Sapiens

<400> 300						
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tgcttttagtg	cctattatag	ttaattcttc	aactccaaag	tctaaaacag	ttgaatctgc	120
tgaaggaaaa	tctgaagaag	taaatgaaac	attagttata	cccactgagg	aagcagaaat	180
ggaagaaaagt	ggacgaagt	caactcctgt	taactgtgaa	cagcctgata	tcttggtttc	240
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tgctgaaagt	cagccanaan	cactttctga	caaggaanat	gtttgcaata	cagttgaatt	360
tctgaatgaa	aaagcnggaa	aaaagggang	ctcagttatt	atctcttagt	aaggaaaaag	420
cactttctagg	aagaagcttt	ttgataacctg	aananatgaa	atgttcacag	tngaaaggaa	480
naanngcagt	ancatttccn	tccttgaaan	gattnnngttt	actcaaagga	attngnnnaa	540
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aaaaaaaggga	aatccacnga	ccatt				625

<210> 301
 <211> 792
 <212> DNA
 <213> Homo Sapiens

<400> 301						
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tttnctccat	tatccaatca	catctaaata	acattgaata	tntacagggt	nctctggata	180
ggtaccaaaa	ggtaccacnt	tttatacaaa	cttaattgtg	aaanctgggt	gaaataaatt	240
tncaaatcaa	aatttttttt	aanttttaaa	catncactct	ttaaatttca	aacagtgatca	300
gtgtgacnct	tactttttaa	ggaaaaaaat	tagtttaaaa	tttaatancc	acanatttaa	360
taatttttta	ctttaacact	taatgtacat	tttcatganc	agtaattaaa	atatnttgaa	420
atttttaaatn	tgaaaaattt	caaagtttca	gtatnttaac	attacncttc	aaatgttctt	480
aatatatata	taaacactta	caaattataa	atacaactag	ttgtntntct	acaatacata	540
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aaaataaagt	tcaaattattg	cacaaaaata	atttaactgt	aaatattact	ncntagtgtg	720
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tatgggaaat	cc					792

<210> 302
 <211> 738
 <212> DNA
 <213> Homo Sapiens

<400> 302						
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ttttctccat	tatccaatca	catctagata	acattgaata	tgtacagggt	tcnctggata	180
ggtaccaaaa	ggtaccacat	tttatacaga	cttaattgtg	aaagctgggt	gaaataaatt	240
ttcagatcaa	aatttttttt	aagttttaa	cattcactct	ttaaatttca	gacagtgatca	300
gtgtgactct	tactttttaa	ggaaaaaaat	tagtttaaaa	tttaatagcc	acagatttaa	360

taattttttta	ctttaacact	taatgtacat	tttcatgagc	agtaattaag	atatgttgaa	420
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taatataat	ataaacactt	acaaattata	gatacaacta	gttgatatatc	tacaatacat	540
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ctggtgctat	tcaaggnaaa	aaaatggaat	gccttaaaaa	aataaaatcc	ttaaagaata	660
ggttcaaaaa	ataaagttca	aaatantngc	ccaaaaataa	attaacnngg	taatattaac	720
tacataaggg	taaaacaa					738

<210> 303

<211> 635

<212> DNA

<213> Homo Sapiens

<400> 303

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ctgaggcctt	cccgttgggt	gctgccgccc	ccactgccgg	ctgaggaggg	gcatgaggtt	180
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cgtatggaga	gccgggaata	agttcccctg	tcagtggagg	atgggatact	tcaacctggg	360
ggttgaaatc	aaacactgaa	cctcagagtc	caccaatagc	ctctcctaaa	gcaatcacaa	420
agccagttcn	gaggactgtg	gtcagatgaat	ctgaaaattt	cttcagtgcc	tttctctcgc	480
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aacnaccang	nagaangaan	tgaaaancan	cttacatgaa	tccttgacac	ttgggncaant	600
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<210> 304

<211> 847

<212> DNA

<213> Homo Sapiens

<400> 304

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tacaggcgca	caccaccacg	ccaggctaata	ttttgtattt	ttagtagaga	tggggtttca	180
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aggtttataa	cacaacctgg	ttaccttttt	gaataaaaata	acatttggaa	gaaggcatag	420
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ttatgaatat	tctgtaatat	caaacattca	tttttaattg	gctaaaaata	tgggtttaca	600
aaatatgaac	aggtaatttt	taaaagagta	aattatgtta	aagaacttta	ataantttcg	660
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ccatttgcaa	aatcattata	aataaatttt	cncaattatc	caatcacaa	tctagataac	780
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<210> 305

<211> 767

<212> DNA

<213> Homo Sapiens

<400> 305

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cggtcgagga	ggggcgatga	gttgggtcaa	cgctcccag	ctctccagct	tcgctaagca	240
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gaatcccttg	cacattggcc	aatcaagaac	tcctgaaaca	actgaatcac	aagtaaaaag	660
actccctcct	tgtgtgtttc	aaggggaaaa	ctctgggcaa	caagggtactt	catcacctaa	720
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<210> 306

<211> 1659

<212> DNA

<213> Homo Sapiens

<400> 306

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<210> 307

<211> 831

<212> DNA

<213> Homo Sapiens

<400> 307

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ctcctcaaag	gatatgaagc	cccacagatt	gccttacgtt	gtgggattat	gctgagagaa	480
tgtattcgac	atgaaccact	tgccaaaatc	atcctctttt	ctaatacaatt	cagagatttc	540
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ggattttacta	accagacata	aagtgttggg	agcaagactt	cttagaacia	aattacgaca	660
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<210> 308

<211> 833

<212> DNA

<213> Homo Sapiens

<400> 308

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gagacgactg	actgtgacag	gggccgggga	gctcttcaag	gggccgtttt	cttcaagtct	180
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ttttggaagc	tgctcagaaa	ctcaatgagt	ttgggctgat	tttttaacag	gatctccaca	300
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tggatgttgg	gactttttatc	ccgaaggagg	ttcatcatga	gtttcaggtt	ctccggcttg	420
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aaaatagtgt	cgtaattttg	ttctaagaag	tctgtacca	acactttaag	gtcngggttag	600
taaatccttg	aaagtagcaa	aggcatctga	agcaatatca	aatgttgaca	actccacggt	660
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tcgaatanat	tcctctcaag	cataaaccca	caaacgttaa	ggnaaacccg	tgggggcttc	780
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<210> 309

<211> 1320

<212> DNA

<213> Homo Sapiens

<400> 309

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gttctctctt	ctctctcccc	tccccacct	gttccccctt	catggctgac	cccctctctg	180
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tgggtgcgac	ccgaattcag	attgccctga	agtatgatga	gaagaataag	caatttgcaa	540
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cacacagaca	ctggaagaca	gctggtgagt	gagcccgccc	ttgggccccca	ggagctgccc	1080
tgcttgacc	taggcccagc	aatgagatcc	cccaatgcc	gtgcaactaa	gagaagggtt	1140
ccactgggaa	ggctgagaac	ccctctctc	atgggttctc	tacaggcaaa	aaggcaatgt	1200
aacctagtag	gatggttccc	agaattcctt	tcgaatttgc	catttcgttt	cccatgaatc	1260
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<210> 310

<211> 1030

<212> DNA

<213> Homo Sapiens

<400> 310

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ccaaaatgac	aggttcagca	ccacccctt	ctccaacacc	taacaaagag	atgaagaaca	180
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agaccaaate	ttgtcagaca	gatgatactt	ggaggacaga	atatgttcca	gtgcctatcc	300
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ctacagttcc	tgttcctgtg	ccagttcctg	ttttctgccc	tgctccattg	gacagcagtg	420
agaagattcc	tgagcaatt	gaggagctaa	aaagcaaggt	ttcttcagat	gctcttgata	480
cagagttgct	tacaatgacg	gatatgatga	gtgaagacga	ggggaaaaca	gagacaacca	540
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accagagac	acagtcacgc	atgcctgatg	taccatatga	accaagattt	ggatatcgaa	660
atagattttc	ccagagctgc	tgaggagctt	gatatggaaa	atgaattttt	attaccacct	720
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gcagcmttcc	tttcaaatta	tacgtatggg	cgtaaatgca	tgggnaacac	cgggtcaaaa	900
actaagnnac	ttggatgaaa	gatcntccgg	gnaattagaa	tgagttaaaa	tccttccaaa	960
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<210> 311

<211> 546

<212> DNA

<213> Homo Sapiens

<400> 311

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gctaaaataa	aaagcacaga	aggaaaaaat	aattgatttg	tacataagct	aaattataat	180
tccttttaaaa	ttgtttataa	caagatggaa	tacagaatga	cgattagatt	tataacgtgt	240
gtttatatga	atatgtttgt	aacagtgcga	tttctgatat	ggtataacaa	agtatatgat	300
tgaggagacct	gcaaaatgta	tactcgggtt	gtttttcttt	ttaaaaatat	tgtnaaacag	360
gcaagtgcag	cttaacagca	ttatgggttca	ttacnnggtt	tgggntatat	acctttttca	420
gcttctgtna	tgagcaagtt	gtgttttcaa	tccccacttt	caatgtctat	gggaaggcg	480
enttttgctn	tgttttgttt	tgtcttttaa	ncnttttnaa	acnnggggaca	canatggang	540
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<210> 312

<211> 518

<212> DNA

<213> Homo Sapiens

<400> 312

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ctgggaaana	attgggggtct	ggaataaanc	tncaaattggg	tcnccngctt	cactaaaacc	180
ttggcaacta	aggctcattt	ttccaaaggg	gttnctnang	tcnctccct	ntnaaatcnt	240
tttattatnc	cagggtggct	gttgctaang	cttnggtggg	aaancangaa	ntnctgctn	300
ctnctgctgc	tggtgctgct	gggcantnca	agggaaaacc	cccccgacaa	actgggataa	360
ngtgacctgn	ttgcncaent	ctngggccct	attncctnac	ctgncctgna	aatncttccc	420
nctctgcccc	ctttactnnt	gccaanncct	tcccccccg	ttaggataaa	aattccccctn	480
aacctccnac	ctttggttan	cgggggtccc	ctncccc			518

<210> 313

<211> 660

<212> DNA

<213> Homo Sapiens

<400> 313

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tatcggaaga	gtcagtggct	ggagacagtg	gtgtgtacga	ggcttccgtg	cagagactgg	120
gtgcttcaga	agctgctgca	tttgacagtg	acgaatcgga	agcagtgggt	gcgaccogaa	180
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tgagtaacct	ttctgctctg	ttgcagcaac	aagaccagaa	agtgaatatc	cgcgtggctg	300
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gtacaacctt	ctcagctaca	aatacttgaa	gaaacaagac	aangggactc	aagccantgg	600
gagtcattgg	ccctggcctc	angggctgcc	aacaacgggc	cccgtgttct	ggccccgttt	660

<210> 314

<211> 516

<212> DNA

<213> Homo Sapiens

<400> 314

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ctcatgttag	tggtctnact	gggcatctga	gaccagcgtg	gctgtcacc	cacatanact	120
aggctgctta	gcccaccag	cctatcacac	tgcccgtctc	acgttgggca	gccacataaa	180
aacacgtcac	agctcaanaa	natccgtgga	tgcacctctg	aatccccccc	aatggtttct	240
gtgcattttt	ttaatattgt	acaaaatatg	ttaactagga	aaaattagct	gtactgtgac	300
aagtgcggga	cgctctatta	ggattaccgt	cccccaggca	ttacttctta	ttgcagtaag	360
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caactcaata	ctgcttttagt	tcattttaat	tttctttccc	aaaaatacac	tcctaaatat	480
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<210> 315

<211> 677

<212> DNA

<213> Homo Sapiens

<400> 315

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tccttacatc	catattcaaa	catgagatac	catattatga	gttccagtct	cttcaaaactg	120
aaatttggtc	tcaaaacaaa	tatactcatt	tcaaagaact	tccaactctt	ctccactgtg	180
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gtgttcaatc	cctggngct	gattcaagaa	aaataattcc	acaagggtgc	tattcntngt	660
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<210> 316

<211> 843

<212> DNA

<213> Homo Sapiens

<400> 316

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caagaacctc	ttgctgaatt	ttcatataaa	actatttctt	gttggcagtt	tcctaccccc	840
gga						843

<210> 317

<211> 835

<212> DNA

<213> Homo Sapiens

<400> 317

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cttcaaaggc	atctcaggag	gatgccaatg	aaatcaagtc	taaacgggat	gaagaagaac	180
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ataaagagaa	aggcaaacat	gatgatggac	ggaaaaagga	agcagaaatt	atcaaacaat	360
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atccgntttg	attgcagcaa	nttgccggga	anaanggatg	atgccaaatt	ttcaaagccc	780
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<210> 318

<211> 582

<212> DNA

<213> Homo Sapiens

<400> 318

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canagctcac	caagttcn	ccgtatcaaa	tttccanaat	accacaaga	tttcttcacc	180
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aaatagactg	aatcanccta	nacataattt	cattagggnt	gcaaaccacc	cangggaaag	420
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aaactttgng	cccatagaca	acttattttt	taaaatatca	ctccccaaaa	gtagccatgt	540
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<210> 319

<211> 827

<212> DNA

<213> Homo Sapiens

<400> 319

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ataataactc	attacaaggc	ccagaagacg	atgattcaga	aggatttggg	caaagagttc	240
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tgtgttattg	ttacgtgtgt	cagagcaaat	agcatccaag	gttcaattgg	attcctggca	360
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catttgagga	ccctgatgga	aaaccagcat	tggaatcagc	tgattcagga	tgctcagaag	480
cgtggtgcca	ttattaagac	ctgtgacaaa	aactatagac	atgatgcagt	gaagattctg	540
aaactcaagc	ctgtgctgca	gagaagtctc	actcancctc	ctaccatagc	cccaaagggg	600
tccaaacccc	aagggtggnt	tgcccaagca	ncaagctaga	cagttggatt	ttgccaaaga	660
caatcctggt	tgccggtctc	tccaatacca	aaacaaccct	ccggactccc	aagggaat	720
tacnccctaac	ggtttacctt	caaagggacc	ctgaaaagac	ccnccctggt	caatgaccaa	780
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<210> 320

<211> 598

<212> DNA

<213> Homo Sapiens

<400> 320

aaatttttaa	aggattttgt	tatttgctat	acaaatatac	atttcaactt	ttacaacatt	60
cactccagtc	tgacctcctt	gtctatagaa	gactaagaga	tcaacatttc	cagtctctga	120
cttcaaggac	attattacgg	atacacaatg	ccctctgaaa	gcttttgcaa	atgacagaaa	180
atactgaaga	tgaccagagg	ctcaggtgtt	aaggatgcac	tttccatgtt	ttccaacagc	240
acacaaactc	cttacaaaaa	acaagcttat	ctagatgggc	ccacgagctg	gtcatcttca	300
gtttacaata	tgctgtggct	gctggcccat	gtcactgggc	tttcctataa	aagctttctt	360
ttcttgggaa	ctgctgtcct	cctgtcccaa	gtgtcctctt	gtcccaccta	gagttcctcc	420
tggtgtgatg	ggtctcggaa	ccacacttct	cctgtccccc	ttcactgaaa	gccctggcct	480
ctctcctgtg	acagagctcc	tcttccgggt	catcacattt	gctctgacac	gtgggnagcc	540
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<210> 321

<211> 808

<212> DNA

<213> Homo Sapiens

<400> 321

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gcctgcaggc	tctgcgttcc	ctgtctggca	cccaaagtc	catgacctcc	ctatccccac	120
gttctctct	ctcctcccc	tccccacct	gttccccct	catggctgac	cccctcctgg	180
ctggtgatgc	cttctcaac	tccttggagt	ttgaagaccc	ggagctgagt	gccactcttt	240
gtgaactgag	ccttggtaac	agcgcccagg	aaagataccg	gctggaggaa	ccaggaacgg	300
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gtgtctcagc	cgccgtatcg	gacgagtcag	tggctggaga	cagtgggtgtg	tacgaggctt	420
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tgggtgcgac	ccgaattcag	attgccctga	agtatgatga	gaagaataag	caatttgcaa	540
tattaatcat	ccagctgagt	aacctttctg	ctctgttgca	ncaacaaaga	ccagaaagtg	600
aatatccgcg	tggctgtcct	tccttgcctt	gaaaagcaca	aactgcctgt	tccgggaccc	660
gggctctgga	cgcctcaaac	actccaagtg	ttcaatgaag	gtgttctggg	tatccatggt	720
ccctatccaa	accnttaac	aagaaagacc	tttaanaag	tccaatgtcc	ngtnaccaac	780
cggacaaggg	agccaatctt	gggaaaaa				808

<210> 322

<211> 629

<212> DNA

<213> Homo Sapiens

<400> 322

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tgattcatgg	gaaacgaaat	ggcaaattcg	aaaggaattc	tgggaaccat	cgtactagggt	120
tacattgcct	ttttgcctgt	agagaaccca	tgaggagagg	ggttctcagc	cttcccagtg	180
gaacccttct	cttagttgca	ctggcattgg	gggatctcat	tgtgggcct	aggtccaggc	240
agggcagctc	ctggggccca	agggcgggct	cactcaccag	ctgtcttcca	gtgtctgtgt	300
gctgtcctcg	ccctcctgcc	tcttctccaa	ctccactgct	gtctgttcca	acagagcaag	360
acacagcgtc	cgtgctggca	ngccctgaag	caagggccat	gactccact	ggcttgagct	420
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ctccccaaga	cgggaagac	ctcccgccaa	ggctgatttg	gggcgcctcc	caagcactct	540
tccaaaatgg	ctcccgctcg	ttgggacana	catcctnactt	tttaangect	tccggggnaa	600
agggctgggn	taaggacatt	gggtncccc				629

<210> 323

<211> 798

<212> DNA

<213> Homo Sapiens

<400> 323

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ccaaaatgac	aggttcagca	ccacccccctt	ctccaacacc	taacaaagag	atgaagaaca	180
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agaccaaatac	ttgtcagaca	gatgatactt	ggaggacaga	atatgttcca	gtgcctatcc	300
ctgtgcctgt	gtatatccca	gttcttatgc	acatgtacag	tcagaatatt	cctgttcccta	360
ctacagttcc	tgttctctgtg	ccagttcctg	tttttctgcc	tgtctcattg	gacagcagtg	420
agaagattcc	tgcagcaatt	gaggagctaa	aaagcaagggt	ttcttcagat	gctcttgata	480
cagagttgct	tacaatgacg	gatatgatga	gtgaagacga	ggggaaaaca	gagacaacca	540
acatcaacag	tgtaattatt	gaaacagata	taattgggttc	agaccttttg	aagaactctg	600
accagagac	acagtccagc	atgcctgatg	taccatatga	accagatttg	gatatcgaa	660
tagattttcc	cagagctgct	gaaggagcct	tgatatggga	aaatgaattt	ttattaccaa	720
ccngtttttg	ggcgaaagaa	tatgaaggaa	caagcccaaa	cctcgattct	aaaaaaaagg	780

ggagccaagg agaaaagg

798

<210> 324

<211> 754

<212> DNA

<213> Homo Sapiens

<400> 324

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cattacagta	caccaatatt	gacagcattc	tcttgtctat	ttttggtaca	gaagatggta	120
tctctctaca	taaccttgta	aggcttcagt	aactaaaatg	taaaaccaa	caaaacaaaa	180
ccccaaaaca	aaacaaaaac	cccagcctat	tagttttacag	tttattttta	aaattccgaa	240
agacactgca	agttctaaac	tttttagtagt	gctacccata	cacaaccatc	tggttaagaa	300
cccagtaaaa	gagccccctt	ccaaggaagc	tttgcaacag	tagagttgtg	caatatggat	360
gtttcttact	acaagaaaaa	aattatacat	ggcacattct	cattcatatt	ctgtaatgta	420
aaaagttaca	aacataccta	atcaaataaa	taataataaa	aaaagaattt	gaatgtattt	480
gttaagtata	ctaaaaccac	tacatagaat	aatggcaact	ttcactcaca	gattattttac	540
atggttaata	ccagcgtggg	tacactgcta	caaaactcaa	aacagaagga	gtaaacttga	600
aatgttttcc	ataataaaga	tctagcanca	tgactatcct	aatgccgttt	tatcccgaat	660
gcttctggca	acgttccctt	ttaatccggt	gtctcatcca	attcaaaaan	tggcctttac	720
caaaaaatat	cctttttaca	gaaagaaacc	cgtt			754

<210> 325

<211> 854

<212> DNA

<213> Homo Sapiens

<400> 325

ggtcaggggt	gagagctgga	atctctgcac	gggccttgga	aaacgactgt	cttcttctgc	60
caaaatgtca	ggaattggaa	ataaaaagagc	agctggagaa	cctggcacct	ccatgcctcc	120
tgagaagaag	gcagctgttg	aagattcagg	gaccacagt	gaaacaatta	agctaggagg	180
tgtctcttca	acggaggaac	tagacattag	aacactgcaa	accaaaaatc	gcaagctggc	240
agaaatggtg	gatcagcggc	aggccattga	agatgaactt	cgtgagcaca	ttgaaaaact	300
ggaacgacga	caggccactg	atgatgcctc	actattgatt	gtcaaccgat	actggagtca	360
gtttgatgaa	aacatccgta	tcctccttaa	acgttatgat	ctggagcagg	gcttggggaga	420
cctactcaca	gaacgaaaag	cccttggttg	gcctgaacca	gaaccagact	ctgatagcaa	480
tcaggagcgt	aaagatgacc	gagagagagc	agttccagt	aagagatgga	gtctcagctg	540
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ttgcaagaaa	aagtggagct	cttatcccgg	gaagctaacc	agtgggagat	aatctgatag	660
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acanggaatt	gacaagatct	tcctcaggaa	aaagcatcgc	aaccatgggtc	tcaaggngtt	780
cctccaaagt	tgcaagaggt	aaaattgggg	naaaagccga	attcaccaan	tttccgggtcc	840
tgggaagtcca	anga					854

<210> 326

<211> 760

<212> DNA

<213> Homo Sapiens

<400> 326

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cagaattttc	tggaaaagag	ggatcacaa	aaccctgtaa	aaaggagact	gagagtaatt	120
catagctcac	caagttctct	ccgtatcaaa	tttccagaat	accacaaga	tttcttcacc	180
agctcagtc	tgactcaacc	tcttcaatct	ttattttcatt	agaagacaaa	gggtcatatt	240
atttaaaatt	attctagtct	caagaaattt	aaagacttga	agtagtagag	cattcaaaac	300

ttaaataact	ttaacaagaa	agccagctga	tcttaacaag	ttactctgct	agtaaattggg	360
aaatagactg	aatcatccta	gacataattt	cattagggtc	gcaaaccacc	caggggagag	420
tagcacaatt	ataccatttt	gtaatccaca	ttcacaagaa	gtttgctaca	caaatagaaga	480
aaactttgtg	cccatagaca	acttattttt	taaaatatca	ctccccaaaa	gtagccatgt	540
ttccactttt	gttccctttt	ccacatcaaaa	aataccaact	tgattttcttc	aggaggaatg	600
gacaatccaa	gtttatacaa	gtgggctggg	aaaaagaaaa	cactgaaaag	tctaaaagca	660
caagataaac	aaagcctggg	aagggaagac	agttaagagt	tattttgtttc	caantcaatc	720
cnaaaaccca	anggcttgta	attaacaagt	cctttccggc			760

<210> 327

<211> 852

<212> DNA

<213> Homo Sapiens

<400> 327

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gcagacccaaa	tcttgctcaga	cagatgatac	ttggaggaca	gaatatgttc	cagtgcctat	120
ccctgtgcct	gtgtatatcc	cagttccctat	gcacatgtac	agtcagaata	ttcctgttcc	180
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tgagaagatt	cctgcagcaa	ttgaggagct	aaaaagcaag	gtttcttcag	atgctcttga	300
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caacatcaac	agtgtaatga	ttgaaacaga	tataattggg	tcagaccttt	tgaagaactc	420
tgacccagag	acacagttcca	gcatgcctga	tgtaccatat	gaaccaagat	ttggatatcg	480
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ctgttttttg	cgaagaatat	gaggaacagc	ccaagacctc	gatctaaaaa	aaaagggagc	600
caagagaaan	gctgtatcaa	ggataccaag	tctcatgatg	ataagtctga	caatttcaga	660
atgcagcntt	cctttcaaat	tatacgtatg	ggcgtaaatg	catgggnaac	accgggtcaa	720
aaactaagnn	acttggtatga	aagatcntcc	gggnaattag	aatgagttaa	aatccttcca	780
aatccantna	agttttaaag	agggtntaat	ccctcaaaa	ccanagctgg	ngccttaaca	840
aggggggttaa	cc					852

<210> 328

<211> 799

<212> DNA

<213> Homo Sapiens

<400> 328

aaaaggacac	taagggtttta	ataaggggaa	caaaaaattg	ttttcaccag	catagattca	60
cattacagta	caccaatatt	gacagcattc	tcttgctctat	ttttggtaca	gaagatggta	120
tctctctaca	taaccttgta	aggcttcagt	aactaaaatg	taaaaccaa	caaaaacaaa	180
ccccaaaaca	aaacaaaaaac	cccagcctat	tagtttacag	tttattttta	aaattccgaa	240
agacactgca	agttctaaac	ttttagtagt	gctaccata	cacaaccatc	tggttaagaa	300
cccagtaaaa	gagccccctt	ccaaggaagc	tttgcaacag	tagagtgtgtg	caatatggat	360
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gttaagtata	ctaaaaccac	tacatagaat	aatggcaact	ttcactcaca	gattattttac	540
atggtaatac	ccagcgtggg	tacactgcta	caaaactcaa	aacagaanga	gtaaacttga	600
aatgttttcc	ataataaaga	tctagcaaca	tgactatcca	atgctgtttt	atcccatttg	660
cttctgcaac	gttccctttta	atccgtgtct	catccagttc	anaantgtcc	ttatcaanaa	720
taacctttac	tagaagaaac	cgtncagca	tattttcaan	gggtttccgg	tccaattgaa	780
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<210> 329

<211> 978

<212> DNA

<213> Homo Sapiens

<400> 329

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cagaacataa	attattagga	aacattaaaa	atgtggccaa	gacagctaac	aaggaccact	180
tggttacagc	ctataaccat	ctttttgaaa	actaagcgtt	ttaagggtag	tgaaagtata	240
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caagtctgaa	gagaccctgg	atgaggggtcc	cccaaaatat	actaaatcct	gttctgaaaa	360
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atgccaaagg	tttaagtttt	aaggctcggag	taggcaaagt	tatcagagga	tgggatgaag	540
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acggaaagaa	aggacagcct	gatgccaaaa	ttccnccaaa	tgcaaaaactc	acttttgaag	660
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<210> 330

<211> 1017

<212> DNA

<213> Homo Sapiens

<400> 330

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caggagacct	ggaccagacc	acgatgtgga	aacgctggct	cgcgctcgcg	ctcgcgctgg	120
tggcggctcg	ctgggtccgc	gccgaggaag	agctaaggag	caaatccaag	atctgtgcca	180
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tctgcattga	gcaatgcaaa	cctcacaaga	ggcctgtgtg	tggcagtaat	ggcaagacct	300
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agggggccca	gaccagacn	gaggangaga	tgancngata	tgtccaggag	ctccaaagct	960
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<210> 331

<211> 799

<212> DNA

<213> Homo Sapiens

<400> 331

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gcttggaagc	caagccaaaa	acgagacagc	caagccgatg	atcccgaaaa	cattaaaacc	120
caggagcttt	ttagaaaaagt	tcgaagtatc	ttaaataaat	tgacaccaca	gatgttcaat	180
caactgatga	agcaagtgtc	aggacttact	gttgacacag	aggagcggct	gaaaggagtt	240

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aatttccgga	agctgctact	gaaccgttgc	cagaaggagt	ttgaaaaaga	taaagcagat	420
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<210> 332

<211> 881

<212> DNA

<213> Homo Sapiens

<400> 332.

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tggcggtcgc	ctgggtccgc	gccgaggaag	agctaaggag	caaatccaag	atctgtgcca	180
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gctatcagtc	caaccgtgat	gagctccgac	gtcgcatcat	ccagtggctg	gaagctgaga	480
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tgtgcccttg	gaggatgaaa	cgtatgccan	atggagcttg	aaancgaggt	ggactgtaan	840
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<210> 333

<211> 810

<212> DNA

<213> Homo Sapiens

<400> 333

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atgcctgcct	caactggatcc	aaaatccagg	ttgattacga	tggacactgc	aaagagaaga	180
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gcagcaacta	cagtgaatc	ctagacaagt	attttaagaa	ctttgataat	ggtgattctc	360
gcctggactc	cagtgaattc	ctgaagtttg	tggaaacagaa	tgaaactgcc	atcaatatta	420
caacgtatcc	agaccaggag	aacaacaagt	tgcttagggg	actctgtgtt	gatgctctca	480
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tcaacccatc	tttcaaccct	cctgagaaga	agtgtgccct	ggaggatgaa	acgtatgcag	600
atggagctga	gaccgangtg	gactgtaacc	cgctgtgtct	gtgcctgtgg	aaattgggtc	660
tgtcagccat	gacctgtgac	ngaaagaatc	agaagggggc	ccagaccag	acngaggang	720
agatgancng	atatgtccag	gagctccaaa	gcttaggaaa	cagcttgaaa	aganccagag	780
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<210> 334

<211> 808

<212> DNA

<213> Homo Sapiens

<400> 334

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aacagaaa	tgtagatt	gtttcttgaa	gtttgactac	ttaaaaacat	aggtgtaaag	180
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aaaactgata	tagtccagag	tcacggcatg	tggaatgtt	tccatggaca	ctggatctta	300
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ctaagcccta	tgcttttaga	gggctgaagg	aaccaaacct	agtttaatcc	tggttggttg	420
ctccatgcaa	aactttatgg	aagactcccc	agactaggct	atttagcagc	ttccatgaat	480
ggctctcaga	tcagtgtgatt	ctacggcata	gacgacagct	gccctattta	cacagaagct	540
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ttaacaaatt	gnggactct	tgcccttct	tcccatagng	tccaagggct	ggtaaaacct	720
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<210> 335

<211> 758

<212> DNA

<213> Homo Sapiens

<400> 335

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agagaagacc	aggtgtccag	agagtggacg	aaggtgggtg	gaacactgta	caagggggcca	180
agaacagtcg	ggtactggac	cctcaaaaat	tcctaaaaat	cactaagcct	acaattgatg	240
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gagcaaaggc	aagtgagact	gatgccttac	ggtcaagtgc	ttccagttta	aacagattct	360
ctgccctgca	acctccagca	cctcaggggt	ccacgccatc	cacgcctgta	gagtttgatt	420
cccgaaggac	cttaactagt	cgtggaagta	tgggcagggg	gaagaatgac	aagccccctc	480
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acaatcagtc	tcaagaagag	cagcggagag	agatgctgga	gaccgtgaag	cagctnacan	600
gaggtgtgga	tgtggagagg	aacagccttg	agctgaaccg	aaataaacia	gggagtcagc	660
aaaaccccg	aanttcagca	atgtcagctt	attgacaagg	gttgattatc	agaagaggac	720
tgganaggaa	gtccaaatct	atcatggtna	atTTTTTc			758

<210> 336

<211> 785

<212> DNA

<213> Homo Sapiens

<400> 336

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ttgctctaaa	gatttcaaga	gtattaagag	tactttttct	agggtagcac	tttttttttt	180
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agatttgatg	ccaaaaaaaa	aaaaatcttt	cttaccttgt	tcaccccaaa	ctttctcaaa	360
tctggactaa	atgctatacc	ttaaaacaaa	catgagngnc	atcttgaagg	ggagggaaat	420
ttattttctc	gctttttctat	tatacaagtt	gtttacagaa	actgcaaatt	aaaaaattac	480
actggcattt	gcagtcctta	aaataaatta	aaagttctca	actttttttt	ttttgctaaa	540

cattttttta	agtatgagtc	cttgtttaaa	aagaaaagat	taaaacagaa	aatattttct	600
ataaatacnt	gnattttggg	tttaagggct	cccgccctaa	ggnttgaagg	ttacttttat	660
cccaggaccc	tttttctctc	atggaaaccc	tttttttenc	ttttcccttt	tcccacttcg	720
ngccnccent	nggggggttc	tggcaaaaaa	tggcccttgc	tgcnetgggg	aattggccaa	780
aaacc						785

<210> 337

<211> 643

<212> DNA

<213> Homo Sapiens

<400> 337

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cagaacataa	attattagga	aacattaaaa	atgtggccaa	gacagctaac	aaggaccact	180
tggttacagc	ctataaccat	ctttttgaaa	actaagcgtt	ttaanggtac	tgaangtnta	240
nntaaagtgt	ctgancaagt	naaaaatggn	aancttantg	aagataancc	caaagaaacc	300
aagtntgang	agaccctgga	tgaggggtcca	ccnaaatata	ctaaatctgn	tctgaaaaag	360
ggagataaaa	ccaactttcc	caaaaaggga	gatgttggtc	actgctggta	tacaggaaca	420
ctacaagatg	ggactgtttt	tgatactaata	attcaaacaa	gtgcaaagaa	naagaaaaat	480
gccaagcctt	taagttttta	ggtcggagta	cgcaaaagtt	atcanaggat	ggggatgaag	540
ctctcttgac	tatgagtaaa	ggagaaaagg	ctngactgga	aaatggaccc	aaaatggctt	600
accggaaaaga	aaggggacagc	ctgatnccaa	aatttcccca	aat		643

<210> 338

<211> 831

<212> DNA

<213> Homo Sapiens

<400> 338

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taagggattt	atctctcaaa	agctgggacc	aagtaaacaa	atttttattaa	ctccttgaat	180
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caaggccaag	ttttatcatt	gttgctaata	tccttagagc	tgaagcactg	ctatttcaat	300
caatatccac	taattccact	tcaaaaagtga	gttttgcatt	tggnggaatt	ttggcatcag	360
gctgtccttt	ctttccgtaa	gcccattctg	gttcaatctc	cagtcogagcc	ttttctcctt	420
tactcatagt	caagagagct	tcatacccat	ctctgataac	tttgccctact	ccgaccttaa	480
aacttaaaagg	cttggcattt	ttcttcttct	ttgcacttgt	ttgaatatta	gtatcaaaaa	540
cagtcccatc	ttgtagtgtt	cctgtatacc	agcagtgaac	aacatctccc	tttttgggaa	600
agttggtttt	atctcccttt	ttcagaacag	gatttagtat	attttggggg	accctcatcc	660
agggctctct	cagacttggt	ttctttgggt	ttatcttcat	ttaagcttca	cattttttac	720
ttgctcagac	actttactta	tactttcagt	acccttaaaa	ccgcttaagt	ttcaaaaaag	780
agggttatag	gctgnaaccc	aagggggggc	ttggtnagct	ggccttgggc	c	831

<210> 339

<211> 758

<212> DNA

<213> Homo Sapiens

<400> 339

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cagtagctgt	cagagggaaa	gactgtgcag	taattgtcac	acagaagaaa	gtacctgaca	180
aattattgga	ttccagcaca	gtgactcact	tattcaagat	aactgaaaac	attggttgtg	240

tgatgaccgg	aatgacagct	gacagcagat	cccaggtaca	gagggcacgc	tatgaggcag	300
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ccgatatttc	tcaggtctac	acacagaatg	ctgaaatgag	gcctcttggt	tggtgtatga	420
ttttaattgg	tatagatgaa	gagcaaggcc	ctcaggtata	taagtgtgat	cctgcagggt	480
actactgtgg	gtttaagacc	actgcagcgg	gagttaaaca	aactgagtca	accagcttcc	540
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ttacatgcct	gtctactggg	ctatcaattg	atttcaaacc	ttcagaaata	gaagttggag	660
tagtgacagt	tgaaaatcct	aaattcagga	ttcttacngg	aagcagagat	tgatgcttac	720
cttgtgnttt	agcngagagg	agacttaacc	attggccg			758

<210> 340

<211> 840

<212> DNA

<213> Homo Sapiens

<400> 340

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ggtaagtggc	atcacggatc	tggtaaacta	acgacaatgt	ttagtctctc	tctgctagag	180
caacaagggtg	agcatcaate	tctgcttctg	taanaatcct	gaatttagga	ttttcaactg	240
tcactactcc	aacttctatt	tctgaagggt	tgaaatcaat	tgatagaaca	gtagacaggc	300
atgtaattgc	agtttccact	gtctgttcaa	atgtccaate	aaatttcttc	ttcacttttt	360
tttcaaggaa	gtggttgac	tcagtttggt	taactccgc	tgagtggtct	ttaaaccac	420
agtagtaacc	tgaggatca	cacttatata	cctgaggggc	ttgctcttca	tctataccaa	480
ttaaaatcat	acaacaacca	agaggcctca	tttcagcatt	ctgtgtgtag	acctgagaaa	540
tatcggcaat	tctttttacac	agcatgtcca	caggaatctc	atagccatac	ttggatttcc	600
agttagctgc	ctcatagccg	tgcccttctg	tacctgggat	ctgctgtcag	ctgcattccg	660
gtcatcacac	aaccaatggg	ttcagttatc	ttggaataag	tgaggtcact	gngctggaat	720
nccaataatt	tggcaggnac	ctttctttct	ggggngacaa	ttactggccc	agtcttttcc	780
tttggacagn	tactggaggt	aaggggccacc	ctgggttaat	agccctttaa	aggcntaatc	840

<210> 341

<211> 793

<212> DNA

<213> Homo Sapiens

<400> 341

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caagttaa	gcaatataga	agcctactaa	atacaaatat	aagttcacaa	acacatatgc	120
aacagaaact	tgtttanatt	gtttcttgaa	gtttgactac	ttaaaaacat	aggngtaaag	180
gaaagacatt	canactgggc	cncgngggct	tgntagcagg	cagaggaacc	ctgctttcca	240
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acagatgcta	tagggttttac	aaaactacnc	acncagagaa	agcccaagga	agcctgcagg	360
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atggggcnnc	aaancnttgg	gaatttttacg	gntnaaancn	aaagntngcc	ttnttttccc	540
ccgaaagctt	tgaaaaactt	ttcagngggg	atnggggaat	ttggnttntt	ggggnggttc	600
aattgttnc	ngggtaaaaa	ganacccttg	gggaggnaaa	cccctgngtt	tnaannggcc	660
ttaggggaaa	naaccnttgg	gggtntcntt	ggntttttaa	caaaattggg	gggncntttt	720
ggnccttcc	cccaaaaggg	ggcccanggn	ctgnggaaaa	aaccttttgg	antaaggggg	780
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<210> 342

<211> 906

<212> DNA

<213> Homo Sapiens

<400> 342

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agggctcggt	ctaccaagta	gaatatgctt	ttaaggctat	taaccagggg	ggccttacat	120
cagtagctgt	cagagggaaa	gactgtgcag	taattgtcac	acagaagaaa	gtacctgaca	180
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ccgatatttc	tcaggtctac	acacagaatg	ctgaaatgag	gcctcttggt	tggtgtatga	420
ttttaattgg	tatagatgaa	gagcaaggcc	ctcaggtata	taagtgtgat	cctgcaggtt	480
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ttgaaaaaaa	agtgaagaag	aaatttgatt	ggacatttga	acagacagtg	gaaactgcaa	600
ttacatgcct	gtctactgtt	ctatcaattg	atttcaaacc	ttcagaaata	gaagtggag	660
tagtgacagt	tgaaaatcct	aaattcagga	ttnttacaga	agcagagatt	gatgctcacc	720
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cttacctgtg	tgtttggtaa	caacaaacca	acatcatgga	ggtccctgga	ttgaaaaagg	840
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ttttgg						906

<210> 343

<211> 875

<212> DNA

<213> Homo Sapiens

<400> 343

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tgcacatcac	tggcagagaa	ctgaggtcca	aaatagctga	aacctttgga	cttcaagaaa	180
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aaggcgtggc	tcacaatgtg	aaagcgatgg	tgcttgaact	aaaacaatct	gaagaggacg	300
cgaggaaaaa	cttccagtta	gaggaagagg	agcaaaatga	ggccaaactc	aaagaaaaac	360
aaattcagag	gaccaagaga	ggactagaaa	tactggcaaa	gagagcagca	gagacagtgg	420
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<210> 344

<211> 629

<212> DNA

<213> Homo Sapiens

<400> 344

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cgcatgatcc	atcctgtctt	cagtcagtgc	cttctggaag	ggagggaaag	tcttggtatg	180
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gccgacacac	agcgaactac	atacttttag	aaagagcctc	tgtcacatgg	ctagaacaac	360
aacaacaaca	aagaaaaccc	acaaaaaac	tggagaaaat	atatctaaat	ctctgatagg	420

tctcttagct	agcagtgagt	tcagtatgac	agcacagagt	ctaaaaatat	taattaaana	480
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aatgctgaat	atatataaag	cctgccactc	aatctttgaa	tttcnggggg	cgcaatttta	600
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<210> 345

<211> 724

<212> DNA

<213> Homo Sapiens

<400> 345

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gcaaacatca	ccaaatagct	gggttatagn	gagtttcaca	atatgcccag	gcctttcctt	720
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<210> 346

<211> 907

<212> DNA

<213> Homo Sapiens

<400> 346

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<210> 347

<211> 711

<212> DNA

<213> Homo Sapiens

<400> 347

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ccagtttcaa	agtaaaactg	ttacgancat	nttcactnnc	aaacttctca	tattcnccac	660
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<210> 348

<211> 862

<212> DNA

<213> Homo Sapiens

<400> 348

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attcttcccg	aagtcttctg	tggagtgtct	ttatttctct	ttccatgtcg	tgcttttggg	180
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cagcacgatg	ttgttctact	tcatcttcaa	gttcaaagat	ggtttctttc	atgtcactcc	300
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caatttggtt	cttagcttct	tcttggaagg	ctcggtattc	atcctctacc	ttagcaatgg	420
catcctgtaa	tcgattggca	tcatttcggg	tatgagccag	atcttctctg	aagctactag	480
ccaaagtctc	tgctttttct	ttgtccagcc	tgacactctc	caggagggtcc	tgaatatcag	540
atttgnctcc	agagttatgg	atagaataca	gctctgccac	tttctgcttt	tcattctcca	600
gctgagcctt	caggcgattc	atctctatct	ggtcactggc	cactgnggct	ttgnattcct	660
ctaactgtgg	tgncaaaggc	gcttttcctt	tctgctcnac	tcaaataaat	tcgctccata	720
tgggnggact	ggcgttccct	tggagtggcc	cctatcattt	cttgnggctt	tccttantgg	780
ccttgggttc	tggccatttt	tccaaagtat	tggcttttaa	atggctggct	tgggacnccc	840
aaggaaagct	ggttcccggt	tc				862

<210> 349

<211> 832

<212> DNA

<213> Homo Sapiens

<400> 349

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aacaaaatta	ttttttaaaa	aagcaaaaga	ataaagaata	tatacaaaag	ggacctggaa	180
tctgtaagct	gattccaaaa	acgaaataag	tagaaaatcc	atggtgaaac	ctgaacattc	240
tacctctgct	ttggagaagg	gctatcatat	aacattcagt	cagctgaaga	tggattggta	300
gagggtgtgtc	tatacataaa	cttcagtcac	ttttgcttgt	gcagaatcat	cccaatcttc	360
ccaagactga	atgggcagtc	ctgtgggttt	cttccttttc	catattccca	acaaggctac	420
gtgaagttca	actcttgatg	agccgcttac	aacagcagtt	ccttaggagc	caacatgaca	480
gggtgggtcag	atttccctat	gagaaacaaa	actggccacc	tacagcaaaa	tatcaaaatg	540
ggtaagtcct	tccttccctc	tcctcctgat	tatatacaac	atatctcctt	tcaagactat	600
tatttccatc	atgcttatcc	cttcacaaat	ctaaaccttg	aggtgatatg	aaggaaacca	660
acatcangaa	aagaaaactc	aattcagaaa	tgaagaaaac	tggcaggtat	acaatacacc	720
cccagaacat	ctcaatatcc	ctggccagta	caattcaagt	gnactgggta	caggcccata	780
ggattaaata	attgggcagc	ttgggaataa	agctcatttt	tttnccctca	gg	832

<210> 350
 <211> 782
 <212> DNA
 <213> Homo Sapiens

<400> 350

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natttttttaa	aaaagcaaaa	naataaanaa	tatatncaaa	ngggaccngn	aatcngnaag	180
cngatnccaa	aaccnaaata	agtaaaaaan	ccanggggaa	nccngancat	tcnacctnng	240
nttngnaaaa	gggctatcat	ncaacattca	gncagntgaa	nanggatngg	nanaggnggg	300
ncnatncata	anccttcagnc	atcttngctn	gggcaaaatc	atcccaatnt	tcccaanact	360
gaanggnacg	cccnggggct	ttcttccctt	nccanattcc	caacanggnt	acnggaagtt	420
caactntnga	nganccggtt	acaacagcag	ttccttagga	nccancatga	caggggggnc	480
aaatttccct	atgagaanca	aaacnggcca	cctacagcaa	aatatcaaaa	ggggnaagnc	540
cttcccttcc	cttccctcng	attatatnca	ccatatctcc	tttcangact	atnatttcca	600
tcaggctnat	tccttcacaa	atntaaacct	tgaggggata	tgaaggaacc	caacttcngg	660
aaangaaaac	tcaattcana	aattgaagaa	acctggcagg	tatacaatac	ccccccagg	720
catntcaana	tccttggcac	aagnnccaat	tcagggncct	ggtaccagcc	ccatagaana	780
aa						782

<210> 351
 <211> 775
 <212> DNA
 <213> Homo Sapiens

<400> 351

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tgagaccaca	ggagttgaca	tcactaaaat	tcaagtcaag	agatgtgaga	ccatgagaga	180
gaagcacatg	cagaaacagc	aggagaggga	aaaatcagtc	ttgacacctc	ttcggggaga	240
tgtagcatct	tgcaataccc	aagtggcaga	gaaaccagtg	ctcactgctg	tgccaggaat	300
cacacggcac	ctgaccaagc	ggcttcccac	aaagtcaccc	cagaagggtg	aggtagaaac	360
ctcagggatt	ggagactcat	tattgaatgt	gaaatgtgca	gcacagacct	tggaaaaaag	420
gggtaaagct	aaacccaaag	tgaacgtgaa	gccatctgtg	gttaaagtgt	tgctatcccc	480
caaattggcc	ccaaaacgta	aggcagtggg	gatgcacgct	gctgtcattg	ccgctgtgaa	540
gccactcagc	tccagcagtg	tcctacagga	acccccagcc	aaaaaggcag	ctgtggctgt	600
tgtcccgttt	gtctctgagg	acaaatcagt	cactgtgcct	gaagcagaaa	atcctagaga	660
cagtctttgt	gcttgncttc	aacccagtc	ttnttcagat	tccttacctc	cagaggtgtc	720
ttggnccttt	cttcatncca	aatggagcct	tgaaaaactt	cggccgactt	agctt	775

<210> 352
 <211> 865
 <212> DNA
 <213> Homo Sapiens

<400> 352

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tatttttttaa	aaaagcaaaa	gaataaagaa	tatatacaaa	agggacctgg	aatctgtaag	180
gtgattccaa	aaacgaaata	agtagaaaat	ccatgggtgaa	acctgaacat	tctacctctg	240
ctttggagaa	gggctatcat	acaacattca	gtcagctgaa	gatggattgg	tagaggtgtg	300
tctatacata	aacttcagtc	atctttgctt	gtgcagaatc	atcccaatct	tcccaagact	360
gaatgggcag	tcctgtggct	ttcttccctt	tccatattcc	caacaaggct	acgtgaagtt	420
caactcttga	tgagccgctt	acaacagcag	ttccttagga	gcccaacatga	caggtgggtc	480

agatttcctt	atgagaaaca	aaactggcca	cctacagcaa	aatatcaaaa	tgggtaagtc	540
cttccttcct	cttccttcctg	attatatata	acatatctcc	tttcaagact	attatttcca	600
tcatgcttaa	tncttccaaa	tctaaacctt	gaggngatat	tgaanggaaa	cccaccttca	660
nggaaaagaa	aacctcaatt	tcagaaatgg	aagaaaaact	ggcaggggat	accaatacac	720
ccccccagag	cattttttaa	atatccctgg	ncacaagtnc	caattcaagg	gnacctgggt	780
ccggnccata	gaataaaana	ntgggcactt	tggaaaaaag	cncatttttt	ttcccttcag	840
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<210> 353

<211> 875

<212> DNA

<213> Homo Sapiens

<400> 353

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caaaattatt	ttttaaaaaa	gcaaaaagaat	aaagaatata	tacaaaaggg	acctggaatc	180
tgtaagctga	ttccaaaaac	gaaataagta	gaaaatccat	ggtgaaacct	gaacattcta	240
cctctgcttt	ggagaagggc	tatcatacaa	cattcagtc	gctgaagatg	gattggtaga	300
ggtgtgtcta	tacataaact	tcagtcattt	ttgcttgtgc	agaatcatcc	caatcttccc	360
aagactgaat	gggcagtcct	gtggctttct	tccttttcca	tattcccaac	aaggctacgt	420
gaagttcaac	tcttgatgag	ccgcttacia	cagcagttcc	ttaggagcca	acatgacagg	480
tgggtcagat	ttccctatga	gaaacaaaac	tggccaccta	cagcaaaaata	tcaaaatggg	540
gtaagtcctt	ccttctcttt	cctcctgatt	atatacaaca	tatctccttt	caagactatt	600
atttccatca	tgcttatctc	ttccaaatct	aaacccttga	ggtgatatga	aggaaaccaa	660
catcaagaaa	aagaaaactc	aattcagaaa	atgaagaaaa	ctggcagggg	tacaatacac	720
ccccagagca	tcttcaatat	cccctgggca	cagtncccaa	ttcagggact	gggtacaggc	780
ccataagaat	naaataattg	ggcagctttg	gaataaagcc	tcattttttt	cccttcagggn	840
gggttaaagg	ggccccccaa	accaaaaact	ggggc			875

<210> 354

<211> 705

<212> DNA

<213> Homo Sapiens

<400> 354

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caaaattatt	ttttaaaaaa	gcaaaaagaat	aaagaatata	tacaaaaggg	acctggaatn	180
tgtaaggtga	ttccaaaaac	gaaataagta	gaaaatccat	ggtgaaacct	gaacattcta	240
cctctgcttt	ggagaagggc	tatcatacaa	cattcagtc	gctgaagatg	gattggtaga	300
ggtgtgtcta	tacataaact	tcagtcattt	ttgcttgtgc	agaatcatcc	caatcttccc	360
aagactgaat	gggcagtcct	gtggctttct	tccttttcca	tattcccaac	aaggctacgt	420
gaagttcaac	tcttgatgag	ccgcttacia	cagcagttcc	ttaggagcca	acatgacagg	480
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taagncttct	cttctctctt	ctnctgatta	tatacnncat	atctcctttc	aagactatta	600
tttccatcat	gcttattcct	tccaaatcta	aaccttgagg	ngatatgaan	ggaaaccaca	660
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<210> 355

<211> 862

<212> DNA

<213> Homo Sapiens

<400> 355

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tcgagaactt	cctggagacc	attggcgtga	aggatggccg	cggcatcatc	actgacagct	300
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ccacgggcag	ctctgatgac	cggtcggcac	cctcagaggg	ggatgagtgg	gaccgcatga	420
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ggctggggcc	ttggacggct	gtcagttttg	cacatgatgt	tcctattgta	actntcagag	840
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<210> 356

<211> 750

<212> DNA

<213> Homo Sapiens

<400> 356

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accgcaatgg	ggcctctatc	cacgagttct	gcatcaacct	gcggcagctc	tacggggaca	180
gccgcaagtt	cctgctgctt	ggtctgaggc	ccttcacccc	tgagaaggac	agccagcact	240
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agatggcccc	gggcccggccc	aagtcctcta	ctgtgaagga	acagggagct	tgccgangga	660
cacgaacctc	aatgcccggg	tggaaangtc	tttggcttgt	ccaccaaggc	ttagcccagc	720
ccttgcaatg	nggccccgct	tcggggaagg				750

<210> 357

<211> 725

<212> DNA

<213> Homo Sapiens

<400> 357

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ccccgagcgg	ggacacactg	cagggcttgg	ctganccctg	gtggacaagg	caaagagcct	180
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acttc						725

<210> 358
 <211> 813
 <212> DNA
 <213> Homo Sapiens

<400> 358
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 ataaaaaacg cagtgaattt ccttggtatt gggaaaatca gccaacagga tgtcaaaaat 180
 taaactgcgc tttccatcac aatagaggac gatatgttga tggccttttc ctacctccga 240
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 tttcagttca gcagaacaaa ttgtctgtcc agtccaatcc tccccctcag ctgctggagcg 360
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 gagtttccag tcttttactt cacccttgag ccccgntcca ngctctgaaa aagaaaatgt 720
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<210> 359
 <211> 756
 <212> DNA
 <213> Homo Sapiens

<400> 359
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 tcctaaagaa acagggagaa gagaagggaa ctaaagtgc aagctaaaaga gaaaagctcc 300
 aagaagacaa gcctaccttc aaaaaagaag agatcaaaga tgaaaagatt aaaaaggaca 360
 aagaacccaa agaagaagtt aagagcttca tggatcgaaa gaagggattt acagaagtta 420
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 gagaagctca aacagaagca gcaggaggcg gctttggagc tggaggaact caaggaaaaa 660
 ganggaggag agaaggaagg tcttganga ggaagagcag aggaaggaac aggaggaaag 720
 ccgatcgaa aaccttcaag aggaggaaga agaaga 756

<210> 360
 <211> 706
 <212> DNA
 <213> Homo Sapiens

<400> 360
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cctaccttta	agccagcagt	ttnccttatt	tgggggngcc	ctgctgcant	ggggggatga	660
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<210> 361

<211> 726

<212> DNA

<213> Homo Sapiens

<400> 361

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gagcgagtga	acatgccgcc	cgcggtggac	cctgcggagt	tcttcgtgct	gatggagcgt	180
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<210> 362

<211> 747

<212> DNA

<213> Homo Sapiens

<400> 362

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acatgctagt	cagctngcag	ttttacctcg	taaagatanc	aganaattat	agncaaacca	180
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tanattttnt	anaaaaaatat	gtaatagnga	tcaggaggag	ctnttgttca	aaagtncaac	360
aaagcaangt	taccttacca	taggccttaa	ttcaaacttt	gatccatttc	actccaanga	420
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<210> 363

<211> 1227

<212> DNA

<213> Homo Sapiens

<400> 363

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gaccacccaaa	tggtgccagc	aaggaaatac	cagaattgga	agaagaaaaa	acaattccta	180
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aagatcgtca	tgcactacac	atggattaca	tacttgtaaa	ccgtgaagaa	aattcacact	300
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ccaaagaaac	agggctgcag	ggaactcagt	tagcaagctt	cccagacaca	tgtcagccag	420
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gacagtccag	atgaaattga	catcaatgtg	gatgaacttg	atacccccga	tgaagcagat	1140
tcttttgagt	accctggccc	atgaagaatc	ccacagccac	aaagattctg	gcccagaaga	1200
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<210> 364

<211> 831

<212> DNA

<213> Homo Sapiens

<400> 364

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tctgaggagt	ccgtctcccg	cctcccggag	gagatccgga	gactggagga	agagctccgc	180
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ggggtgctct	ccatgcaggt	ggcttctgog	cgccagaccg	agagcctgga	gtccctcctg	360
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cctgaaagcc	tcagtcaggc	cagtgggaagc	cggacttgaa	aatgctcaag	aactgctgtg	720
gacaagttgg	gtgcataact	cggtcaaaat	tagaaaccaa	cgagnacaat	tttggaaatca	780
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<210> 365

<211> 785

<212> DNA

<213> Homo Sapiens

<400> 365

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caggggctgc	gcttcaggaa	accaaccaa	tgcagaagca	gagaacttaa	atattgtaaa	180
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ctgtccacag	cagtccctgag	catttttcaag	tccgcctcca	cttggctgac	tgaggctttc	540
aggttgtcta	gagaagaaa	tctgtccagg	aagtccctgag	gaggcagacg	ggcggcctgg	600

gcttggtcct	gactgagcag	cgtgtgcacc	tgctcctgcc	ctttctggga	gtgattccac	660
ggtgctgggg	agctngccca	cacttcctct	tcagcttctt	ccacgtcacc	cgtaaaagca	720
cccagctggg	tctcgnccaa	gcttctntacc	gtgctggggc	aggcccatcc	tggntctggct	780
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<210> 366

<211> 816

<212> DNA

<213> Homo Sapiens

<400> 366

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atagtgaggt	tggtgatcca	tcactggatg	ccagggactc	agggcctggg	tggtctggca	180
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aagaaatgaa	gcctctagaa	tcttttagcac	tagaggaagc	ctctggtcca	gtcagccaat	300
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aggagacaga	gttccttgag	ctcggaaacca	ggatatcaag	accaaattgga	ctactgtcag	480
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tgaggcctga	acctcctaata	tctctggatc	ttaatgacac	tcattcctcg	agaatcaagc	600
tcacagcccc	aaatatcaat	ctttctctgg	accaaagtga	aggatctatt	ctctctgatg	660
ataacttttg	acagtccaga	tgaatttgac	atcaatgtgg	atgaacttga	tacccccgat	720
gaagcagatt	cttttgagta	ccctggccca	tgaagaatcc	cacagccaca	aagattctgg	780
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<210> 367

<211> 803

<212> DNA

<213> Homo Sapiens

<400> 367

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ttcaaagatg	gagagaggct	ttggaagttg	aggaaagtgg	ctcagatgac	ctcttaataa	180
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ttattacaca	aagggaaaca	gaaaataacc	aaatgacatc	agaaaagtga	gccacagcag	300
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gattttctgg	tacagaaaaa	gatcaatcct	caagtgatga	aagctgggag	actctgccag	480
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aagaattatc	tcttcaggaa	ggggaacaga	catccttgga	agagggagaa	attccttggg	600
tacagtacaa	tgaagtcaat	gaaagcagca	gtgatgaagg	gaaatgaacc	tgccaatgaa	660
tttgacacgc	cagctttcat	gttggtgggt	aacaataacc	tggangatga	cttccgtgtg	720
aagtgaagac	ttagatgtgg	attggagcct	attttgatgg	ctttgcaaata	gggcctagga	780
gttgctggaa	gctttttcat	aag				803

<210> 368

<211> 809

<212> DNA

<213> Homo Sapiens

<400> 368

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tgcatccat	tttaacaatt	cgtatgtatc	taacaaatac	ataaatccag	atcacaaata	180
atcttaagag	ttaaacaatt	aagaaacaca	aagaatacca	catagatcta	cctttaaata	240
tcagcattca	tattataaga	aataagaaaa	tgtaaaaaaa	ataaaattag	gttaagtcac	300
aacataaaat	agagaaataa	gataaatgct	atttttattaa	tattcatact	tattttcta	360
ttaccttcat	atagtcttaa	ctttttcaaa	aggatccaag	atatgatcaa	ataatatttt	420
agtatctgaa	cttgccagcc	ttagcttata	ccagagcttg	ttaccatgaa	aatcctaaaa	480
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<210> 369

<211> 826

<212> DNA

<213> Homo Sapiens

<400> 369

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gaccaccaa	tggtgccagc	aaggaaatac	cagaattgga	agaagaaaaa	acaattccta	180
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aagatcgta	tgcactacac	atggattaca	tacttgtaaa	cgtgaagaa	aattcacact	300
caaagccaga	gacctgtgaa	gaaagagaaa	gcatagctga	attagaattg	tatgtagggt	360
ccaaagaaac	agggctgcag	ggaactcagt	tagcaagctt	cccagacaca	tgtcagccag	420
cctccttaaa	tgaaagaaaa	ggtctctctg	cagagaaaat	gtcttctaaa	ggcgatacga	480
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acctctagaa	tcttttagcac	tagangaagc	ctntgggtcca	gtcagcccat	cacaggaaga	720
gttagaacc	gaggcanggc	tgggcccggg	tgcagtaccc	cntgacagtg	gaatgggnaa	780
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<210> 370

<211> 783

<212> DNA

<213> Homo Sapiens

<400> 370

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cagacacttt	attctgagca	atccaatgca	tgatagaaaa	accttttagat	atataaaaga	180
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cgagagttgc	aaacatagta	ccataactga	atatttaaaa	ttacatctta	acaaaggcta	300
ggagtagtga	cttcctcaca	cacctcagag	aatgtcttag	agagtaaccc	catagaacat	360
tgtatggctt	caacagaaac	ttcaggattt	tcttccacac	tgagctactg	ccctcaaaca	420
aacttttctca	ctccttgaca	ctatcttctg	tgcaaatttc	tgttctttct	cttaatcaag	480
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aagagctaga	gagctaaatc	atgtgaatgg	ttacctctgn	ctacctatct	gcttanggat	660
tatttttcta	nggattcatc	taggattcta	tttaccttgg	gggtgaaatg	gacatggtag	720
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tgc						783

<210> 371
 <211> 793
 <212> DNA
 <213> Homo Sapiens

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 caccaagcat ccctccagta atgtcaagac ctggttagctc ttccctccatt tccactccct 180
 tgcccccaaa tcaaataaact gtatttgtca cttccaatcc catcacaact tcagctaaca 240
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 ccaatgcggg tagcaagggt atggtttctg agggacagtc agctgctcag tctaactgcc 360
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 <211> 804
 <212> DNA
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<210> 373
 <211> 792
 <212> DNA
 <213> Homo Sapiens

<400> 373
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 aactgaaaga ggcaaaagcac attgctgaag atgccgaccg caaatatgaa gaggtggccc 420

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<210> 374

<211> 745

<212> DNA

<213> Homo Sapiens

<400> 374

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<210> 375

<211> 734

<212> DNA

<213> Homo Sapiens

<400> 375

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<210> 376

<211> 822

<212> DNA

<213> Homo Sapiens

<400> 376

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<210> 377

<211> 812

<212> DNA

<213> Homo Sapiens

<400> 377

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gaatgatata	aatttaggggtc	catatcattt	aatttccctt	gaacctgctc	tgctagggtta	660
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<210> 378

<211> 870

<212> DNA

<213> Homo Sapiens

<400> 378

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caaacaaaaa	tcacactagc	cacaaatttc	caccatatac	acatgaaatt	aatttttaatc	420
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<210> 379

<211> 837

<212> DNA

<213> Homo Sapiens

<400> 379

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aacaagccct	gcaaggaatg	caacagcatc	tactcaaagt	ccaagaggaa	tacaaaaaga	600
aagaagctga	acttgaaaaa	ctcaaagatg	acaagttaca	ggtggaaaaa	atgttggaag	660
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<210> 380

<211> 793

<212> DNA

<213> Homo Sapiens

<400> 380

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gagttaattt	ttgtatatgg	tgtttaggtaa	ggacccaact	tccttgtttg	gcatgtggat	360
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attctatcag	actatatgtc	tgtcttttatg	ccagtaccac	attgttttga	ttactgttag	540
tccatcttta	ttatataaaa	tcattgattac	aagctcatal	tataatatta	tattttatac	600
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<210> 381

<211> 807

<212> DNA

<213> Homo Sapiens

<400> 381

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gatgtttgac	aaggatgtag	taatgcttca	gacaggtgtc	tccatgatgg	atccaaatca	180
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<210> 382

<211> 800

<212> DNA

<213> Homo Sapiens

<400> 382

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<210> 383

<211> 1203

<212> DNA

<213> Homo Sapiens

<400> 383

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<210> 384

<211> 2651

<212> DNA

<213> Homo Sapiens

<400> 384

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<210> 385
 <211> 804
 <212> DNA
 <213> Homo Sapiens

<400> 385

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<210> 386
 <211> 782
 <212> DNA
 <213> Homo Sapiens

<400> 386

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<210> 387
 <211> 865
 <212> DNA
 <213> Homo Sapiens

<400> 387

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<210> 388

<211> 753

<212> DNA

<213> Homo Sapiens

<400> 388

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cananctcac	caaattttta	ttacttttta	tngaaaactg	cagngaangc	taaagggtcta	540
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agccattatt	tttcngcttg	gggacaattt	taaagntttt	cttttgggccc	aaaaaccngg	660
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<210> 389

<211> 737

<212> DNA

<213> Homo Sapiens

<400> 389

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tcataattta	tgacctctac	ttgcaggatg	ggatcgagcg	gtccctgggc	gtgcagaggg	480
tctacacctt	gcaggatttg	ctgtatcaga	gcgactgcgt	ctccttgca	tgcaatctca	540
acgaacataa	ccaccacctc	atcaatgact	ttaccataaa	gcagatgagg	cagggagcat	600
tccttgtaga	cgcagcccgt	ggcgcccttg	tggacgagaa	agccttagca	caagccctna	660
agganggcag	gatacnaagg	ggcaancctt	gacgtgcatg	agtcaaaanc	ctttagcttt	720
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<210> 390

<211> 775

<212> DNA

<213> Homo Sapiens

<400> 390

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gtctaccaca	ggcaaacagt	tttctcccca	ttttgtagta	atgtgatttt	cctattagca	180
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ttcaacactg	caacatcaat	gatgcatatg	tccagaatca	agttacaaag	accatccgat	540
tctttttctc	ttagttcatc	tatttttcac	tgntcttgg	tcccaagtgt	atctgagtga	600
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gtgggctgg	tggganaagg	cccttgggaa	aggatgtgcc	actgtcggga	gggttgtgag	720
tcactgggat	gccttncagg	ggatgatccc	tttcatggct	tggcaggaaa	gtctt	775

<210> 391

<211> 776

<212> DNA

<213> Homo Sapiens

<400> 391

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ttcagcgtca	tatttttatga	cccctacttg	caggatggga	tcgagccggt	ccctgggcgt	660
gcagaaggtc	tacaccctgc	aggatttgc	gtatcagaac	cgactgcgtc	ttctttcact	720
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<210> 392

<211> 909

<212> DNA

<213> Homo Sapiens

<400> 392

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tttttct	tgggaca	ttaaagtttt	tcttttgtca	caaaaacagg	aatgtaccta	180
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tgaataga	atgtaact	ttgatacaaa	tctaatagga	tttgttaaaa	tcagtcacat	300
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cataaggaa	tgcaacatta	ttcttcttga	acccttttag	ctcaagactt	tccactcaat	480
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taatact	ttttttttt	tgcatcatca	gagggtttta	ctgaacttac	aaccgacttg	600
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taatgggat	tttctatta	gccaaaaaag	angtcaccag	nccctgnaga	cttaaaggga	780
cctcaagg	nccaggaat	ggggatttcc	ctcntaaaaa	atttttaatt	ttggggggtt	840
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agggacctg

909

<210> 393

<211> 769

<212> DNA

<213> Homo Sapiens

<400> 393

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tttctgtttg	ggacaatttt	aaagtttttc	ttttgtcaca	aaaacaggaa	tgtacctata	180
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aatagaacat	gtaactagtt	gatacaaata	taataggatt	tgtaaaaatc	agtcacatct	300
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aaaagtgggt	ttgttcatag	acaatctgac	aagttaccat	aaaaagtgtt	tcctgagaca	420
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aatagcagag	gatctgaaac	tgagaaaata	tatttgagta	caaacagctt	gtgaaactta	540
atactttttt	tttttttttg	catcatcana	gggttttact	gaacttacia	ccgacttgcc	600
cgctcagtat	gccagttcan	atgtgaaagg	cgcttttntg	tcagcagcct	gnactggctt	660
caatcctatg	cgtgcaggng	tttaccaca	ggcaaacagg	tttctnccc	catttttgga	720
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<210> 394

<211> 813

<212> DNA

<213> Homo Sapiens

<400> 394

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accccttctg	tgagatcgcg	gtggaggagg	ctgtgcggct	caaggagaag	aagctggtga	180
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tgggtgctgct	gggcaaacag	gccatcgatg	atgactgtaa	ccagacaggg	cagatgacag	420
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tggagaccac	tgaggacctg	gtggccaagc	tgaaggagat	tgggcggatt	tgagcccctc	780
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<210> 395

<211> 762

<212> DNA

<213> Homo Sapiens

<400> 395

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tgggtcccct	gcaggtggct	cgggtccttg	ccaagctggc	agagaaggag	aaggtggacc	360

tggtgctgct	gggcaaacag	gccatcgatg	atgactgtaa	ccagacaggg	cagatgacag	420
ctggatttct	tgactggcca	cagggcacat	tcgcctccca	ggtgacgctg	gagggggaca	480
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atgaaagcca	agaagaagaa	gatcgangtg	atcaacctgg	gganctgggt	gtggacctga	660
ctccagcttt	tttngatca	gtgtgganga	cgggcccacg	cacgggcgcg	tcaangtggg	720
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<210> 396

<211> 822

<212> DNA

<213> Homo Sapiens

<400> 396

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gaaccaccg	gnccttgtna	ggctttactt	cggatctttt	acnggggaat	cgatgaccn	780
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<210> 397

<211> 812

<212> DNA

<213> Homo Sapiens

<400> 397

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ggcccccatc	gatctcccgc	tccactttca	acttgtcccc	ctccagcgctc	acctgggagg	360
cgaatgtgcc	ctgtggccag	tcaagaaatc	cagctgtcat	ctgccctgtc	tggttacagt	420
catcatcgat	ggcctgtttg	cccagcagca	ccagggtccac	cttctccttc	tctgccagct	480
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ccacgtggat	acctcggtct	gcacccatgg	ccaggggcgg	acgaatcgct	tcctggcact	600
gtgcaggccc	acaagctgac	gggcgatgaa	cctccttcac	cagcttcttc	tccttgagcc	660
cgcacagcct	tcttcaccgc	gatctcacag	gaaggggttc	atggagtgtc	tacaaccatc	720
cggngaccac	accgggccct	gtcaggcttt	aactcggant	ctttacgggg	taatcgnntg	780
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<210> 398

<211> 751

<212> DNA

<213> Homo Sapiens

<400> 398

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catcatcgat	ggcctgtttg	cccagcagca	ccaggtccac	cttctccttc	tctgccagct	480
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cgaaaagctt	cttcaccng	aacttncaga	angggttcaa	tggantgctt	tacacattcg	720
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<210> 399

<211> 800

<212> DNA

<213> Homo Sapiens

<400> 399

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<210> 400

<211> 810

<212> DNA

<213> Homo Sapiens

<400> 400

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ttccagaaga	aaggggagaac	tttcttcagc	aattgtacaa	atztatggaa	gatagaggta	180
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810

<210> 401

<211> 860

<212> DNA

<213> Homo Sapiens

<400> 401

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cccagctaga	gctagcagat	ataaagtcca	agcttgagaa	ggtggcccag	cagaaacaag	180
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 $\langle 210 \rangle$ 402

<211> 779

<212> DNA

<213> Homo Sapiens

<400> 402

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tacaggcgcc	cgccaccacg	cctggctaata	tttttgtatt	tttagtagag	attgggtttc	180
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cagcttctag	tttaaacagc	atgtggtggt	tcagagggag	gaccatggag	agctacatgt	360
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atatttttaa	ggctggttnt	ggctagagga	ggatgggcca	anatgtgaca	gggangaaaa	660
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ctgaggggga	aaacccccca	ctgnaccata	tntnaagggc	cgttaaagaa	ttgcagaat	777

<210> 403

<211> 1443

<212> DNA

<213> Homo Sapiens

<400> 403

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actgaaatctc	aaaaagattt	ggaaataacc	aaagaaaatc	tggtctcaagc	agttgaaac	180
cgcaaaaagg	cacaagcata	attagctagc	ttcaaagtcc	tgctagatga	cactcaaagt	240
gaagcagcaa	gggtcctagc	agacaatctc	aagttgaaaa	aggaacttca	qtcaaataaaa	300

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gaatcagtta aaagccagat gaaacaaaag gatgaagatc ttgagcgaag actggaacag      360
gcagaagaga agcacctgaa agagaagaag aatatgcaag agaaaactgga tgctttgcgc      420
agagaaaaag tccacttgga agagacaatt ggagagattc aggttacttt gaacaagaaa      480
gacaaggaag ttcagcaact tcaggaaaac ttggacagta ctgtgaccca gcttgcagcc      540
tttactaaga gcatgtcttc cttcaggat gatcgtgaca gggatgata tgaagctaag      600
aaatgggaga ggaagtttag tgatgcgatt caaagcaaag aagaagaaat tagactcaaa      660
gaagataatt gcagtgttct aaaggatcaa cttagacaga tgtccatcca tatggaagaa      720
ttaagatta acatttccag gcttgaacat gacaagcaga tttgggagtc caaggcccag      780
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aaaaggaaa catttagnca aaaggcncag ttggattcct tggtnaaatc ctgncttctn     1380
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<210> 404

<211> 819

<212> DNA

<213> Homo Sapiens

<400> 404

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gaacatgaca agcagatttg ggagtcctaa gcccagacag aggtccagct tcagcagaag      180
gtctgtgata ctctacaggg ggaaaacaaa gaacttttgt cccagctaga agagacacgc      240
cacctatacc acagttctca gaatgaatta gctaagttgg aatcagaact taagagtctc      300
aaagaccagt tgactgattt aagtaactct ttagaaaaat gtaaggaaca aaaaggaaac      360
ttggaagggg tcataaggca gcaagaggct gatattcaaa attctaagtt cagttatgaa      420
caactggaga ctgatcttca ggctccaga gaactgacca gtaggctgca tgaagaaata      480
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gctattgctg aactgcgtca gcaacatgat aaagaaatta aagagctgga aaacctgctg      600
tncaggagc aagaggagaa tattggttta gaagaggaga acaanaangc ttgtgggttaa      660
aaccaatca gcttatggga acacttgaaa accatcaaaa nggaaacatt tagncaaaag      720
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<210> 405

<211> 761

<212> DNA

<213> Homo Sapiens

<400> 405

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ctgaaaataa ttttattatt ttacagttgt tcaggaaact tcccaggatg ttgtaaccaa      60
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ttaggganag gctaggcagt gaacacatca tgtatgcaat ganaaaataa ccaactggta      180
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cttctcaggt ctatctatat ttaattttgt cttctctata ttctccttcc attgccacag      300
agggcanaga caatggggct gaaaaactgt aataactgnc actaacagca aagtanctta      360
gtnttcaag aggtcaggag ttgcagtgtg gtgttanacc agtcanactc ctggctgaaa      420

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gtcaatgcct aatattggct cccagnggcc cctgagcact gtctcagggc ccacattcca 480
ggaatnttca natnttcctg gaatgacaag aattggaacc ctgctgncca tagacacttc 540
tccctgccct ttgggtgaaag gaaagacttt gggccctttt aataccttan tatcccatgt 600
gatcaagggc caaaagccaa aggggattct tatccttata gcctaagacc ctgaaattct 660
tcccttccca attatatctg gaaattggcc aggggaanaa aaatgctgnc cttcccatgn 720
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<210> 406

<211> 758

<212> DNA

<213> Homo Sapiens

<400> 406

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gatactgaac ttcagattat taggtttatt gaaacccatcc tcttggttg gctgaaagac 60
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attaggctca acaaaccaaa tgtgattctc agattaagca gaagcgttca ggctcagggc 180
agtagaagaa agcagactcg ccagtcctcg cagctccaac ctgtcctcgt atcacctctg 240
tttttgagg cactttccgt gaagagttgg agagaagacc tgtaaattggg aagactgttc 300
cactggaatt gatgttctga tgtagaggt gagagaattc caagttttga ggggagtggt 360
ccaaagagta acaactaagt ctatagatgg cccgtaaaac acagaatgag caggacatga 420
atcattagaa agtagatggc tgctagaagt ggcactcggg tccgtgaatg acagagtga 480
cgcaggactc gcttccatcc aacgccactc cgggtccttc gacaactgtt gcttgtaaga 540
tctattaaca gtgcctgctc ctgagtgccca caggagccaa tgataggagt ccgggaaaga 600
gtccattca ctgngctcta accggctgga tctgctcctc ggccacagga gagagcattt 660
ttcagcagcc actctttggc cncggctctt cttccagcag cttcctttaa atcattcctt 720
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<210> 407

<211> 778

<212> DNA

<213> Homo Sapiens

<400> 407

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aggatcaag agaaaattag tgcctcggag agaactgtta aagctctaga atttgttcaa 120
actgaatctc aaaaagattt ggaaataacc aaagaaaatc tggctcaagc agttgaacac 180
cgcaaaaagg cacaagcaga attagctagc ttcaaagtcc tgctagatga cactcaaagt 240
gaagcagcaa gggtcctagc agacaatctc aagttgaaaa aggaacttca gtcaaataaa 300
gaatcagtta aaagccagat gaaacaaaag gatgaagatc ttgagcgaag actggaacag 360
gcagaagaga agcacctgaa agagaagaag aatatgcaag agaaactgga tgctttgcgc 420
agagaaaaag tccacttgga agagacaatt ggagagattc aggttacttt gaacaagaaa 480
gacaaggaag ttcagcaact tcaggaaaac ttggacagta ctgtgacca gcttgagcc 540
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gaagataatt gcagtgtcta aaggacactt agacagatgt cttcntatg gaagaattaa 720
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<210> 408

<211> 752

<212> DNA

<213> Homo Sapiens

<400> 408

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canattatta ggttnatnga anccatcctn tnggntnggn tgaaanacnt tcctnagtnt 60
nttttacngg accncaaaan atcagggnc tgcaaaatct cancaaatnt taggctcanc 120

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aaaccaaang	ngattntnaa	attaancaaa	ancgttcagg	ctcagggcag	taaaaaaaag	180
caaactcgcc	agnccntgca	gctccaacct	gncctcgat	cncctntggt	tttgaggcn	240
ntttccngga	anagttggan	anaaaacctg	taaanggnaa	aactgttcca	ntggaatnga	300
ngttctgatg	ttanaggnga	nanaattcca	agttttgagg	ggagnggncc	aaagagtacc	360
aactaagtnt	ntananggcc	cgtaaaacnc	anantganca	ggacntgaat	cnttaaaaag	420
taaattggctg	ntaaaagnng	cnctcgggtc	cgatgaatgac	agagtganen	caggactcgn	480
ttccatccaa	cgccantccg	ggtccttcga	caactgtngc	ttgtaanac	tattaacagg	540
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ggggctttta	ccgtctgaat	ctggctcctg	gccncagaga	gagcnttttt	nagnaggccc	660
ncnttttggg	ccccgtnttt	ttttccagca	ngcttcctct	taattcattc	ncttcccggg	720
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<210> 409

<211> 736

<212> DNA

<213> Homo Sapiens

<400> 409

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gctcagccaa	gatcaagtta	aagagcagtg	agctgcaggc	catcaagacg	gagctgacac	120
agatcaagtc	caatatcgat	gccctgctga	gccgcttgga	gcagatcgct	gcggagcaaa	180
aggccaatcc	agatggcaag	aagaagggtg	atggaggtgg	cgccagcggc	ggcggcggcg	240
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caccagcccc	ccaagagaac	acaacttctg	aggcaggcct	gccccagggg	gaagcacgga	360
cccagagcga	cggcgatgag	gaagggtctc	tgacacacag	cgaggaagag	ctggaacaca	420
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caccagcagg	tgaagggtcat	cgctgcccag	gcctcaagcc	gggcacccaa	ccctggatgc	540
cacccccccag	cgggtaccag	aggaaagctg	cagcaggccg	cctcctcccc	caacgcacnc	600
cagccagtgc	catgtcctct	gcaggtggag	ttactggcct	actccttccc	atgaaccctt	660
ccttgctctgc	acttgccagg	ccagagggta	gagcacangg	gtttccccc	acttaccttc	720
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<210> 410

<211> 766

<212> DNA

<213> Homo Sapiens

<400> 410

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ctaccctctg	gcctgggcag	tgcanacagg	gagggtcat	ggggaaggag	taggccagta	180
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cctggggcag	cgatgccctt	caactgctgg	nggccattgc	tcctgtcagg	ctgcttactg	360
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caccactgnc	accgncaccg	ctgcaccacc	accgncggcg	cccgncgntt	ggcgccaact	600
tcatnaccct	tcttcttgca	tctggaatgg	ncttttgctt	ncgcanegaa	ctgntccaaa	660
cgggttaanc	agggcatcna	tatttggaact	tgaactgggn	caancttccg	ncttgaangg	720
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<210> 411

<211> 812

<212> DNA

<213> Homo Sapiens

<400> 411

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agatcaagtc	caatatcgat	gccctgctga	gccgcttgga	gcagatcgct	gcggagcaaa	180
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caccagcccc	ccaagagaac	acaacttctg	aggcaggcct	gccccagggg	gaagcacgga	360
cccagagacga	cggcgatgag	gaagggctcc	tgacacacag	cgaggaagag	ctggaacaca	420
gccaggacac	agacgcggat	gatggggcct	tgacagtaagc	agcctgacag	gagcaatggc	480
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ccacccccca	gcgggtacca	gaggaaaagt	ggcagcaggc	gcctcctccc	ccaacgcctc	600
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tccctgtctg	cactgcccag	gccagagggt	agagcacagg	ggtttcccca	tactacctcc	720
cctccccagg	acactcccag	gcttgggttt	tttctatagg	tttggcgggg	ggccncaggg	780
aggggaccct	gacaataaag	agattggatc	cc			812

<210> 412

<211> 857

<212> DNA

<213> Homo Sapiens

<400> 412

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gaagaagatg	aggagaagat	tcagaatgaa	gattatcatc	acgagctttc	agatggagat	180
ctggatctgg	atcttgttta	tgaggatgaa	gtaaatacagc	tcgatggcag	cagttcctct	240
gctagtcca	cagcaacaag	taatacagaa	gaaaatgata	ttgatgaaga	aactatgtct	300
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gcagctgctg	caggacccgc	aggtagtagc	catgggtatg	tgggttccag	tagtagaata	420
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tcagaaaataa	aaagcacagt	gctgcttctg	gagacatgcn	gacaagnctt	tttttgctga	780
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<210> 413

<211> 790

<212> DNA

<213> Homo Sapiens

<400> 413

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cacagcnnct	agcaagacat	canacncgga	anagnganca	atattcacta	agtaaaatnc	120
agcanatgan	atgtctntca	catgtatatt	naattattca	tgctttttca	atagtctntt	180
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ngcnctacag	tcgtatagta	agaggcagaa	aaaaatgaan	gaatttttaa	taatcttaca	480
cgtgtntaca	gggccaggaa	cgtaatgaat	ccatgttaac	ttaatttcat	ttaaaatnc	540

attttagtaa	gtcncncaac	agaaagatcc	atgcggttga	acagtgtgcc	tgtncttgac	600
aagttagaga	agatccttct	ccaaaaggga	gattcagtct	agggntactt	cagttnttcc	660
catagnggct	acagggcana	atctttttca	aaagcaattt	tctgggtccct	aaatctacag	720
gcntantgg	gacctgtaat	taaaancccc	caattttaag	gangattttt	aaacccact	780
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<210> 414

<211> 1063

<212> DNA

<213> Homo Sapiens

<400> 414

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<210> 415

<211> 824

<212> DNA

<213> Homo Sapiens

<400> 415

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anatnaaaat	ancagttata	attacacaca	taatatagg	accttataca	atgattccaa	120
taaatatcac	aggaaataca	ntgcattttc	aagntgnana	gacnaatact	tnctcattca	180
cagngnttga	catanganag	cctattttaca	tancnatctg	tataaagtca	tgctctnant	240
ancaggntat	ncagngctgn	gccancacaa	tgntttnaga	angtgaagaa	cggncaaac	300
cactnntggn	gctggggatc	tgkanaagcc	acctgnanaa	gcttactct	gagcangact	360
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cactcnanca	natnccaaag	nnctnaga	gggaacnctc	caancctgct	tnatggngat	540
taancatnct	tcttcttttg	cttaacccat	ggattananc	acancagcna	gtacngactt	600
ggntttaccc	ncttctgttg	gaaataagga	ttcttgatng	actaaannnc	agctggtnaa	660
aacntaactn	tccctcaatt	tagcmttatt	ntatgaancc	ggggcctant	ntcntgttca	720
aaaangngnt	tttaagttcc	ggtaatccta	ccgnaatta	nttgggggct	ntgaattcan	780
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<210> 416

<211> 838

<212> DNA

<213> Homo Sapiens

<400> 416

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aaatacacaa	ttttactagc	aaatgcctct	actgtaatcg	ctattttacc	acagatactc	180
tgctcaacca	tatgttaatt	catggtctgt	cttgctccata	ttgccgttca	actttcaatg	240
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tacgagagag	gcaccaagtt	attcagacgg	tcacccagtt	tgagaaaaag	ctnacctaca	660
aatgnatcca	ttggcttggt	gngnatacca	gcaacatgga	ncggctnaac	tatcacttct	720
gnatctagnt	cactggangg	gccgtttggn	aagganccca	aatgggccag	gataagacaa	780
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<210> 417

<211> 880

<212> DNA

<213> Homo Sapiens

<400> 417

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tgatggtggt	gaactaaaga	taaaactaaa	tatccaaaat	gcagcactca	ttggtttgct	180
gcttcaacac	aacacacttt	tatacagatc	taaaaggtgt	caaaattagt	agctgcaaag	240
tcaattcttg	catgtgattt	tagcttaaaa	gatttcagaa	aacagatctg	aaataaccagt	300
ttttgttttt	gacagctgta	atgtcaagga	tattcagaac	aagaaaaatc	ctataatata	360
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gtgcaaaaaac	taagtctgtc	caaaaagtc	atactagcgc	agttttgagc	ttttgctagg	480
taaactagat	agagcgttta	ttacacagca	agggcaacac	taaaaaaaga	aatctatgat	540
gggcacacag	taacaggatc	atgagcatca	cttgaatagg	tctaaaagac	tgtcaaatat	600
acatttcaac	tattcagaat	gaatacatga	aaaaaaatcg	cttttcccaa	aggtctacta	660
tacncattan	actgggagct	tgatgtttgg	gccctacact	accatgggga	attangttta	720
acacttntta	aaaacatttg	gccaatcatt	tcncagangg	gaaagaaatg	ttgaaaaggc	780
cgataaaaata	aacccttggg	ttttcctcgg	gggattcatg	gagtcacccg	ccttaatggg	840
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<210> 418

<211> 763

<212> DNA

<213> Homo Sapiens

<400> 418

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cctcctctcg	aatgcagcag	ccacagatct	ctgtctacag	tggttcagac	cgacatgctg	180
tacaggtaat	tcaacaggca	ttgcatcggc	ccccagctc	agctgctcag	taccttcagc	240
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atttaagcag	ctcccagctt	cagagccttg	ctgctgttca	ggcaagtttg	tccagtggaa	360
gaccatctac	atctcccaca	ggaagtgtca	cacagcagtc	aagtatgtcc	caaacgtctg	420
tagaaaattct	tatggactgg	aatcttcctc	aaggcttact	ttgttcctgg	gatgcagtgg	480
tgcatagaag	atagggcatt	gactcactca	gacctggctt	gcccagcatg	cattgcaaca	540

ataatgtgca	agttattaaa	gacatgagtg	aattcgtgac	agattgtcag	aaaagaaaca	600
agagttttct	acaacaaaaa	actggcttat	ggaacatata	cttctgcttg	agttgaatgt	660
gttggggctg	agtgtaaaga	aatgcaagct	gcaaactctg	cttacatgtg	gaaccaaagc	720
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<210> 419

<211> 753

<212> DNA

<213> Homo Sapiens

<400> 419

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ttgaaatagt	agngtaacac	ttcacaaata	gagtaaaaac	cttataatct	tccatttttc	300
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tgatatacnc	acattatcat	ttttgcttta	catactcaat	tatcttttaa	ataaaaataaa	420
aattgaggag	aaaatccggt	atattatcta	cacatttact	gtttccagca	cttttcattt	480
ctttgngtag	attcaaattt	ctgnatctct	ccctttgccc	aaagaacttc	ttttcatctt	540
tcttatagtt	caggtctgct	ggcaaccaat	tagctcagcc	tttggtttgc	taaaaaagtt	600
catatattat	cttgattttc	aaatgggnatt	taagctctat	ataggaattc	ttaggtgact	660
ttaattcctt	catcattggg	aagangtcat	aaagggcttg	caaaggacta	gaaatctgct	720
tacatttttt	natttggtta	tctttcttac	cca			753

<210> 420

<211> 799

<212> DNA

<213> Homo Sapiens

<400> 420

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tcttaatcag	ttcaattctt	tcatttccgt	cataaaaagaa	atgcttaata	gattggagtc	360
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aattgacaaa	gttttttaaca	acattggagc	agaccttctg	actggcagtg	agtccgaaaa	540
taaagaggac	gggttacaga	ataaacataa	aagagcatca	cttacacttg	aagaaaaaca	600
aaaatttagca	aaagaacaag	agcaggcaca	gaagctgaaa	agccagcagc	ctcttaaacc	660
ccaagtgcac	acacctgttg	ctactgttaa	acagactaag	gacttgacag	acacactgat	720
ggataaatatg	tcctccttga	ccagccttcc	tggtagtacc	cctaaatctt	ctgcttcaag	780
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<210> 421

<211> 770

<212> DNA

<213> Homo Sapiens

<400> 421

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aggaaaacca	ttgtgtaaaa	cagtaggcgg	atctttcaga	gactccaaat	cattgacaat	180

tcagaaggat	cttgtcgtg	catttgacaa	cggagaccag	aagggtttct	tcgatctgtg	240
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ctatctccac	atccattttg	ccatctatct	tttgaagtac	tctgtgggga	gaccggacaa	360
agaggagctg	gatgaaaaga	tttctacttt	caaaacctac	ctggagacca	aaggggcagc	420
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atataaggag	aatgggacan	agtaacaaag	aaatcttgca	gcagcttcac	cagcagctgg	660
ntgaagcttg	aaccgtaggt	caatgacata	cctcaaacgg	naccataaga	tccaggcccg	720
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<210> 422

<211> 733

<212> DNA

<213> Homo Sapiens

<400> 422

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ctgtggccgc	cgggggtgac	ggncccttgc	aggggctcat	ccccgctcca	ctgcacatta	180
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agaacaccat	ctggtagctc	ttcggaattt	agctgcttga	tgatgaattc	tatctggcgg	420
atcatttcag	cattgccttc	tttgatgaag	cagcgtagga	tgtcttccat	tcccattgct	480
cttgcttcct	cacgaatgga	tggancagaa	aggatgctgt	acagagctcc	attcacatac	540
ggctgtatct	catggttttc	atggccaaga	agatccgaaa	ggactttgag	caccgaggcc	600
tgccaccttg	gcacacatgg	tcttccttgn	gctgcgagg	gcagagggtc	atggagcaaa	660
agccaccgag	tactccaacg	gggnagccag	acagggcagn	cagggtcctt	tcanaacatc	720
aaccagccc	gaa					733

<210> 423

<211> 862

<212> DNA

<213> Homo Sapiens

<400> 423

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atcgagaaac	tgcacctgtt	ttccagcctg	aaaacaaacc	agaaagtaag	ccaggcccag	180
ttggaccaga	actccctcct	ggacacatcc	caattcaagt	gatccgcaaa	gagggtggatt	240
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ctgctccagt	tccttgtcct	cctcccagcc	ctggcccttc	tgtgttcccc	tcttccccca	360
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caaaaccagg	agaagccgag	gctcccccaa	aacatccagg	agtgtgaaa	gtggaagcca	480
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acaaaaagta	cctgatgatc	gaagagtatt	tgaccaaaga	gctgctggcc	ctggattcag	600
tggaccccga	gggacgaagc	cgatgtgcgt	caggccagga	gagacgggtg	caggaagggtt	660
cagaccatct	tggaaaaact	tgaacagaaa	gccattgatg	tccangtcaa	gtccagggtct	720
atgaacttca	agccaagcaa	ccnttgaagc	agatcaagcc	cctggaggga	atcatggaaa	780
aggggtgccgt	ggcagcaaga	caagggcaag	aaaaatgctt	ggaaatggcn	gaagatcccc	840
acacnggaaa	ccagcaggcc	cg				862

<210> 424

<211> 859

<212> DNA

<213> Homo Sapiens

<400> 424

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gagatgaaga	aaatcatctc	attaaaatgg	caacatttct	gataaatgtt	tcatatttat	180
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aaccacagct	aacaggtggt	gggggtgccc	aagtagacag	ggctgcagaa	caagcaacgg	300
ggttaaactt	ctcaacaac	aagcaacttc	tttatttgta	cagagtaaga	atatagaaga	360
aaagcatcat	tttctttttt	agccctttta	ttagtgtttt	gcctccaccc	aagttactgc	420
ataccaagca	gctaataaaa	accaactgac	ttaaagtctc	tgaaatgcat	gcaacttaaa	480
attccctaaa	gcacacatcg	gttccgagtc	tgatttttac	agggcagagg	ctacggtgct	540
gctgggttac	caggggtgtc	tggcatgctg	ctggggtttg	aagtcgctgc	tgctgnggct	600
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<210> 425

<211> 837

<212> DNA

<213> Homo Sapiens

<400> 425

cagaatggag	gtggagtccc	taaacaaaat	gcttgaggag	ctaagacttg	aacggaagaa	60
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tgatactttg	aaaagggtcac	agctttttac	agcagaaaagc	ctacaggcca	gcaaagaaaa	180
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aaaattaaag	acagagttac	agatggtaca	ggatgaagct	ggaagtcttc	ttgacaaatg	300
ccaaaagctt	cagacggcac	ttgccatagc	agagaacaat	gttcagggtt	ttcaaaaaca	360
gcttgatgat	gccaaggagg	gagaaatggc	cctattaagc	aagcacaaaag	aagtggaaag	420
tgagctagca	gctgccagag	aacgtttaca	acagcaagct	tcagatcttg	tcctcaaagc	480
tagtcatatt	ggaatgcttc	aagcaactca	aatgaccag	gaagttacaa	ttaaagattt	540
agaatcagaa	aaatcgagag	tcaatgagag	attatctcaa	cttgaagagg	aaagagcttt	600
tttgcggaagc	caaaacccaa	agtctggatg	aagagcagaa	gcnacagatt	ctaagaactg	660
ggagaagaaa	gtaaatgaac	caagagactc	agcaggaata	ttatgaaagg	gaacttaaaa	720
anctgcaagt	agaatggaag	aagaggggct	taattaacga	nggccattct	aagcattttg	780
gaagaattag	cttggaacnc	cttttggaac	ttgaacttgt	cncaggtaat	gccattt	837

<210> 426

<211> 724

<212> DNA

<213> Homo Sapiens

<400> 426

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atcacaggaa	atacagtgc	ttttcaagtt	ggagagacaa	atactttctc	attcacagt	180
tttgacatag	gaaagcctat	ttacataaca	atctgtataa	agtcagtctc	ttagtaacag	240
tctatacaga	gctgtgccaa	cacaattctt	tcagaatgtg	aagtaccggg	caaaccactc	300
ctggcgctgg	ggatctggag	aagccactgg	agaagcttca	ctctgagcag	gactcaaaaa	360
tgtcttgggc	ccttttaggtg	gcaactggctg	tggaagtggg	ttgctgctgt	tgaactcaat	420
atcgtggact	ggagaattag	gaatgggatc	caggcggtta	ggatgtccat	tgcccactcc	480

accagattcc	agagcactta	nattgggaac	actcacaac	ctgtttgttg	gtgatattac	540
attcttcttc	ttttgcttag	ccaatggatt	aataacacca	acagtaggac	ttgagttaaa	600
cacttttggtg	aaagttagtt	tctcgaattg	actaattcca	gctgataaaa	cttattatcc	660
tcaattagtt	tctttatgan	ctgggcctct	ttctgtaagc	atggccttta	attctggaat	720
catc						724

<210> 427

<211> 981

<212> DNA

<213> Homo Sapiens

<400> 427

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acacacacac	acacaactca	aagagttana	atcattacnt	ncaaatgaaa	gtcgtaatga	120
tagatgatga	tagntncaat	gaanctgnga	ncatanatta	angaaacana	naacantncn	180
aaaggtccac	aaatctggtc	ctatgaaaag	agtaaaatta	ccaagactng	gtgaaaganc	240
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aaggcacacn	taancnatat	cagcaataaa	angggnnact	ttantacana	ttctgcaanc	360
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ttctttgntn	aanaattctt	ncncccaaag	aaaaccctt	tggcccccana	agttntttna	960
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<210> 428

<211> 655

<212> DNA

<213> Homo Sapiens

<400> 428

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aaacccaatt	tggtcatgat	ttaatathtt	ttggatcgct	ctggatttgg	tttgctaata	120
ttttattcat	ccaagaaata	ttcattagag	aaattggcat	gggatttttt	tttcattgta	180
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tggtgaaatt	cacaattgaa	gacatctggg	cctagcgtgt	tctttgtagg	aagaatatta	360
agaaagaatt	ccatttcttt	aaaagttacg	agcacagtgt	gccttccaga	tctatggatc	420
ccacatgagt	tccagattca	accaattgtg	tattaaaaat	atttgggaaa	aaaagccaca	480
agaaataata	caactatata	aaataatata	atttttaaaa	tacaatataa	caacgattta	540
cacagaatgt	nccattatgt	taggnattat	aagtaactca	gaggntattt	aaagnatgtg	600
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<210> 429

<211> 788

<212> DNA

<213> Homo Sapiens

<400> 429

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gngccttctt	taaacggggc	aattaagaat	ccaggccgac	taccacaatc	ttantggggg	780
tcccagca						788

<210> 430

<211> 655

<212> DNA

<213> Homo Sapiens

<400> 430

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ntggggccnc	cgggggngac	gggcctttgc	aggggctcat	ccccgntcca	ctggacatta	180
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anaacnccat	ntgganactt	ttcggaattt	aactgcttga	tgangaattc	tatntggngg	420
ancatttcag	cattgccttn	tttgaagaac	cancgtagga	nggtttccat	tcccattggt	480
nttgnttctt	cacgaatgga	tggaaacana	aggatgctnt	acananctcc	attcacatac	540
ggntgnatnt	catggntttc	atggccaana	anaatcccaa	aggctttgag	cccaggntcg	600
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<210> 431

<211> 844

<212> DNA

<213> Homo Sapiens

<400> 431

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cctgtcacta	gagaatttga	tgttggtcga	cacattgccca	gtggtggcaa	tgggctagct	180
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<210> 432

<211> 807

<212> DNA

<213> Homo Sapiens

<400> 432

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ggtgtaggaa	caattttgtg	aaaacatagc	accattacct	caacgaatga	acaaatttta	600
catactggat	ttttttcaaa	tgacttattt	tcatatttag	tagttcaagg	tctataagct	660
ggtatattaa	gctttctttc	tggttaagag	ntcaacactt	acatcatggt	atcttacnaa	720
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<210> 433

<211> 866

<212> DNA

<213> Homo Sapiens

<400> 433

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aagagctggg	actcaagggtg	agaattcaga	acccatctct	tcgagaaaaat	gatttcattg	420
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<210> 434

<211> 764

<212> DNA

<213> Homo Sapiens

<400> 434

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gnatttcttaa	atacttttaa	cctgagtaac	atttataaat	atgttatagg	aaacctcaca	600
gtcacaagtc	acactagaat	ccatatgttc	agtatctggg	ctttccccac	accagaatcc	660
atctgtccag	tatctgggct	ttcccagtc	ttcctcttct	cataagttcc	caanggcagc	720
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<210> 435

<211> 834

<212> DNA

<213> Homo Sapiens

<400> 435

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tgggaatttt	aggtatttac	aaatgtactt	ttactcataa	gaagttagga	atcaccaaag	420
agcagctggc	cggaaaagt	ttgocctatc	ttattcccct	gagtattgaa	aacaatctta	480
atcttaatca	gttcaattct	ttcatttccg	tcataaaaaga	aatgcttaat	agattggagt	540
ctgaacataa	gactaaaact	gagcaacttc	atataatgca	agaacagcag	aaatcttttg	600
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aattggcaaaa	gttttttaaca	acattggagc	agacctntg	atggcagtg	agtcgaaaaa	720
taaagangac	gggttacaga	ataaccttaa	aagagcatcc	ttaccacttg	gaggaaaaac	780
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<210> 436

<211> 812

<212> DNA

<213> Homo Sapiens

<400> 436

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tcagaagttt	gaatttgaaa	tgaaatatga	aggtagtagt	caggggaagtc	acatcagagt	180
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caatgaaatg	aagggttaagt	tgaattttgt	agtattttgct	cagtctctgt	actaaacaat	420
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tttctcactg	tcattcttaa	tgcaaacaaa	tcaatacagc	atcaagattt	tttacaatatt	540
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<210> 437

<211> 842

<212> DNA

<213> Homo Sapiens

<400> 437

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agcttttttag	aaaagttcga	agtatcttaa	ataaattgac	accacagatg	ttcaatcaac	360
tgatgaagca	agtgtcagga	cttactgttg	acacagagga	gcggctgaaa	ggagttattg	420
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<210> 438

<211> 678

<212> DNA

<213> Homo Sapiens

<400> 438

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nngctctaaa	gatntcaaga	gnattaanag	nacttttntc	agggnagcac	tnntttttttt	180
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cnttttttta	agnatgann	cntgggttaa	aagaaaagnt	ttaaaccgaa	aatatttttct	600
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<210> 439

<211> 826

<212> DNA

<213> Homo Sapiens

<400> 439

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gtgaaaagct	gtggaagaaa	atggagaaga	actgagccag	accgtaatgg	ggcctgaaag	780
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<210> 440
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 <212> DNA
 <213> Homo Sapiens

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 ctttttttct ctttccctn ttccactcgg gcacacgtgg ggggtttctg cnanaattgg 660
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<210> 441
 <211> 883
 <212> DNA
 <213> Homo Sapiens

<400> 441
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 gaagcctact ggtacttgaa ggtaagaaca gtatgaccag ggagtttctg gtggactttc 780
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 ttnttgacag gatcaaccaa ncccaaatgg ccaatgggga act 883

<210> 442
 <211> 777
 <212> DNA
 <213> Homo Sapiens

<400> 442
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<210> 443

<211> 875

<212> DNA

<213> Homo Sapiens

<400> 443

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gcctacggc	aagtgttnc	agttaaacag	atctntgncc	tgaaccttca	gaaccttang	840
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<211> 756

<212> DNA

<213> Homo Sapiens

<400> 444

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<211> 783

<212> DNA

<213> Homo Sapiens

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gaaacctcta	ttaaccagcc	aaaagtcgta	gcacttagta	ataacaaaaa	agatgatata	660
aaggaaacag	attctttatc	agatgaagtt	acacacaata	gcaatcagaa	taccagcaat	720
tggtcttctc	catctcggat	gtctgattca	gttctcttaa	tactgatagt	agtcaagaca	780
cct						783

<210> 446

<211> 866

<212> DNA

<213> Homo Sapiens

<400> 446

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tttacaaga	ggtgttaaag	ggtttcaatc	aaaattatta	aaactataca	gtacaataac	180
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cctacttact	ctgactagca	agaatggaaa	gtgagtccaa	ctcacttttg	caaaaataat	300
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aaagcataac	agattaaaaa	ttcccaaatt	gcattttctt	gtaaataaaa	atgaagtgc	420
ataaccaa	attgctctaa	tgaaggttc	cagactagcc	tcaactaaac	agttattggt	480
cttctatggc	acttttttct	ggtccaaata	accatgcatt	aatccttacc	attacatggt	540
actcaaattt	tatttgatta	catagaacaa	aaacaaataa	aattaatggt	ctggataaac	600
aaaattaata	aacctctatc	atcaaata	tgttacagta	actaggaaca	aagaaaggca	660
gtttggtggg	taaaacacta	ttacactgat	ccccatagga	aacccttcta	aagactctgg	720
aagtgttgag	ttcacattta	atggtacctg	tagaaacagn	cctttatttg	gacaccttta	780
cccactggca	ngccctaang	gacccatccc	tttgccttat	aacttttcac	aagcaattct	840
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<210> 447

<211> 789

<212> DNA

<213> Homo Sapiens

<400> 447

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aatcggtcgc	acttcccatc	ttttcctcgt	ttgtcagcaa	ttgggatgaa	gccaccaaaa	180
gatctttgct	taataagaag	aaaaaagagg	caaggagaaa	acgaagagaa	agaaattttg	240
aaaaacaaaa	ggagaggaag	aagaagaggc	agcaggctag	gaagactgca	tcagttctta	300
gtaaagatga	tgtggcacct	gaaagtgggtg	atactacagt	gaagaaacct	gaatcaaaga	360
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caacaaatga	atccgaagac	gaaatcccac	agctggtacc	aataggaaag	aagactccag	480
ctaataaaaa	agtagagatt	caaaaacatg	ccacaggaaa	gaagtctcca	gcaaagagtc	540
ctaactccag	cacacctcgt	gggaagaaaa	gaaaggcttt	gccagcatct	gagaccccaa	600
aagctgcaga	gtctgagacc	ccagggaaaa	gccagagaaa	gaagccaaaa	atcaaagaag	660
agcagtgaag	gaaaaaagtc	cttcgctggg	gaaaaaagat	gccgaagaca	gacttcaaaa	720
aagccagang	ccaggttttc	ccactcctag	taaactctgtg	agaaagcttt	ccacaccccc	780

aaaaaatgg

789

<210> 448

<211> 820

<212> DNA

<213> Homo Sapiens

<400> 448

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cctgcctcag	cctccctagt	agctgggatt	acagggtgtcc	accaccatgc	ccaattaatt	180
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gcccctggac	tacttatgga	ggtttttaaaa	aatcttttaa	gtccaggcct	gacgtttaga	360
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ccattttttg	ggggtgtggg	aagcttttct	cacagattta	ctaggagtgg	tgaaaaactt	540
ggcctctggc	ttttttggag	tctgtctcgc	atcttttttc	cccagcgaag	gacttttttc	600
cttctactgc	tcttctttga	tttttggtct	cttctcttgg	gcttttccct	ggggtctcag	660
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gagggggngc	ctggggatta	ggactctttt	gcctgggana	cttcttttct	tgnggggnang	780
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<210> 449

<211> 936

<212> DNA

<213> Homo Sapiens

<400> 449

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aggtgaaaga	gttgatgtgc	cagattgaag	catcagctaa	ggaacatgaa	gcagagataa	180
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tccagaagaa	atatgaatgt	gagttagaaa	atttaaggaa	agccacctca	aatgcaaacc	300
aagacaatca	gatatgttct	attctcttgc	aagaaaatac	atttgtagaa	caagtagtaa	360
atgaaaaagt	caaacactta	gaagatacct	taaaagaact	tgaatctcaa	cacagtatct	420
taaaagatga	ggtaacttat	atgaataatc	ttaagttaaa	acttgaaatg	gatgctcaac	480
atataaagga	tgagtttttt	catgaacggg	aagacttaga	gtttaaaatt	aatgaattat	540
tactagctaa	agaagaacag	ggctgtgtaa	ttgaaaaatt	aaaatctgag	ctagcaggtt	600
taaataaaca	gttttgctat	actgtagaac	agcataacag	agaagtacag	agtcttaagg	660
aacaccatca	aaaagaaata	tcagaactaa	atgagacatt	tttgtcagat	tcagaaaaag	720
gaaaaattaa	cattaatggt	tgaaattcaa	ggtcttaang	gacagtgtga	aaacctaccg	780
ccaggaaaag	caagaagcca	ttttaaantt	ntgagagntt	accagagga	ttttggaaat	840
ttcccaannc	gaactggggg	gaatctgctg	ggaaaaatag	gtcaggaggt	cgaatcatgg	900
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<210> 450

<211> 806

<212> DNA

<213> Homo Sapiens

<400> 450

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agaatagttg	ggcattttaa	taaaatttgc	taaatgaatg	aaaaatccaa	aataaatcat	180

gaagccattt	ataaatcaca	ccaatcttgc	ttgggttaaa	caatagaaag	taacactttt	240
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acgaactgtg	tttttaacaa	ctcattattt	ggctactata	tttcccaatc	tatttctaaca	360
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ggaatccttt	aatagtatca	actctgctct	cctatctcgt	aattcttttt	gntctagtag	540
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ggactggaat	tcttctaact	cttttccctt	aagaagaacc	tttttcttgg	ntcataggcc	780
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<210> 451

<211> 909

<212> DNA

<213> Homo Sapiens

<400> 451

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tgagagagag	agtattaaga	gggaaataca	gaattccctt	ctacatgtct	acagactgtg	180
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tcatgaagga	caggtggatc	aatgcagggc	atgaagaaga	tgaactcaaa	ccattttgtg	300
aaccagagct	agacatctca	gacaaaaaaa	gaatagatat	tatgggtggga	atgggatatt	360
cacaagaaga	aattcaagaa	tctcttagta	agatgaaata	cgatgaaatc	acagctacat	420
atttgttatt	ggggagaaaa	tcttcagagc	tggatgctag	tgattccagt	tctagcagca	480
atctttcact	tgctaagggt	aggcccgagc	agtgatctca	acaacagtac	tggccagtct	540
cctcaccaca	aagtgcagag	aagtgtttct	tcaagccaaa	agcaaagacg	ctacagtgc	600
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<210> 452

<211> 672

<212> DNA

<213> Homo Sapiens

<400> 452

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aatgttcaca	antntaaatt	naaacctttt	gcactaaaaa	ancacaaaaa	ancaaacaca	120
aaaccacagg	cntgaactgn	aaacctgtct	taactatgaa	ctggncctta	ggttaattct	180
tannngccat	tcantatttc	nttccttggn	aactgtaatg	ttntagcacc	ggatgatctc	240
ccgnanaggt	nctagaanng	acngnctgcc	agngnangga	gatncttccn	tatacaccac	300
ttnanacnca	taccgtcnan	tttcanaccn	accagacgg	nangcacatg	gngatggggc	360
cncacnccna	ctntnanggn	aacggaagta	gggcaggngg	cgcattnggtt	gcacatcttt	420
aatgtattgc	attcgnaaaa	aaaaggccag	ntttcnatcc	caggcgtgct	ctngacctna	480
gactttaatn	ncatgattta	naanatncag	nacgntattg	cctaaatntt	attctataca	540
tttccatcag	tggttnagga	aaacacttta	aatgcaactn	antccacat	cananncact	600
gnggttacag	ntttagctca	ttgggcaatt	tttngaagca	atTTTTttnng	aaangctntt	660
ggaatgnccc	cc					672

<210> 453

<211> 834

<212> DNA

<213> Homo Sapiens

<400> 453

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ggaagaagaa	gcttcgttgt	gagagggagg	agcttcccac	catctacaag	tgtccttacc	120
agggctgcac	ggccgtgtac	cgaggcgctg	acggcatgaa	gaagcacatc	aaggagcacc	180
acgaggaggt	ccggggagcgg	ccctgcccc	accctggctg	caacaagggt	ttcatgatcg	240
accgctacct	gcagcgccac	gtgaagctca	tccacacaga	ggcgcgggaac	tatatctgtg	300
acgaatgtgg	acaaaccttc	aagcagcggg	agcaccttct	cgtccaccaa	atgcgacatt	360
cgggagccaa	gcctttgcag	tgtgaggtct	gtgggttcca	gtgcaggcag	cgggcatccc	420
tcaagtacca	catgacaaa	cacaaggctg	agactgagct	ggactttgcc	tgtgaccagt	480
gtggccggcg	gtttgagaag	gcccacaacc	tcaatgtaca	catgtccatg	gtgcacccgc	540
tgacacagac	ccaggacaag	gccctgcctt	ggaggcggaa	ccaccacctg	ggccaccgag	600
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gtgcacccgc	atgggagggg	cggagggttg	cttgccgncc	ttggtgctgg	angcgggctt	780
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<210> 454

<211> 703

<212> DNA

<213> Homo Sapiens

<400> 454

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tacaaatctc	ctcgactgct	ttagtgggga	aaggaatcaa	ttatttatga	actgtccggc	120
cccaagtcac	tcagcgtttg	cgggaaaata	aaccactggt	cccagagcag	aggaaggcta	180
cttgagccgg	acaccaagcc	cgcctccagc	accaagggcg	ggcagcacc	tccgaccctc	240
ccatgcgggt	gcacacgaag	ggtgaggctg	acacagccac	tgcggagtcc	aggctgctan	300
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ggtcacagag	gggctcgggt	gccaggtgg	tggttcgcgc	tccaggggca	gggccttgtc	420
ctgggtctgt	gtcagcgggt	gcaccatgga	catgtgtaca	ttgaggttgt	gggccttctc	480
aaaccgccgg	ccacactggt	cacaggcaaa	gtccagctca	gtctcagcct	tngtgggt	540
catgtggtac	ttgagggatg	cccgtgcct	gcactggaac	ccacagacct	cacactgcaa	600
aggcttggt	nccgaatgtc	gcatttgggg	gacgaaaaag	gtgcttccgc	tgcttgaaaag	660
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<210> 455

<211> 825

<212> DNA

<213> Homo Sapiens

<400> 455

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atcctttgga	gataaaaagaa	aaaccagaag	aagcaggtca	tgaagctgag	gaaagaggag	180
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aagatgacaa	ggcagaaggg	gaagaggaaa	tggacacagg	agctgatgac	caagatggag	300
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ggaaggagca	tgctcctgt	gggcagactg	gtgtggagaa	catgcagaac	acacaggcca	540
tggagctggc	tggggccgca	cctgagaagg	agcaggggaa	agaggaacac	ggaagtggag	600

ctgcagatgc	aaaccaggca	gaaggccatg	aatcgaattt	cattgcccag	ttggccttcc	660
agaacacacc	aggaaaaaca	cacagagttt	taagaggaaa	cctgggcagg	cttgacaatt	720
gaacgttnca	tgggtgatca	caattgaacg	tgtgcacaag	aagctganga	cttgtggaat	780
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<210> 456

<211> 740

<212> DNA

<213> Homo Sapiens

<400> 456

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agaataaaaa	atgatataac	ttcagggtaca	tgctttggga	cacttggtta	aacaaggaat	120
ctgtgtcttt	gatgaccacc	tcaaaagggt	cgcagacttc	acagtgtaac	ttggaaacag	180
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cacagcgttt	ctttcccgaga	atgagactgg	ctcagtcacg	cttgaaagca	gtgtgaggaa	420
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ccaagggatc	gttttttatng	atgacctggg	cacctataat	gnccagttgc	tttatgagaa	660
ccacacacac	accacattct	tcctacctn	taagagaagg	taggttcctt	tcacaataag	720
gaaaaccccc	ccttataactt					740

<210> 457

<211> 726

<212> DNA

<213> Homo Sapiens

<400> 457

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tcactagtta	cagtctcgcc	gaggtctcgg	ctgggggtgg	gcagtttagt	agtcacaggc	120
cagaactcct	gtgggggtctc	tttaaaatgc	taacacccag	gttaaaagac	ttgggggcaag	180
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ccgcgtgccc	cggcctttct	gggacctgct	gaggaccatc	tgtgctcgga	gagcgtcctg	600
ttccaatgac	ttcatcctgg	ctggccttca	caagcgcacg	cttctcggn	ttcagggccc	660
cggacttcgg	caaggggaca	nggcacgctt	cgggtgccgg	tggcttcggg	actttggacg	720
ccgcaa						726

<210> 458

<211> 870

<212> DNA

<213> Homo Sapiens

<400> 458

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ataaaagaaa	aaggcaagcc	acttatgctg	aacccaagaa	caaacaaggg	aatggcattt	180
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caagatatct	aagccttacg	atttcataga	aacttgaaga	aatgactag	ccctttggaa	300
aaatatatct	acataatggg	aatacaagaa	agaaatgaga	aattgtttta	tagaataactg	360
caagatgaca	ttgagagttt	aatgccaaatt	gtatatacac	cgacggttgg	tcttgctgc	420
tcccagtatg	gacacatctt	tagaagacct	aagggattat	ttatttcgat	ctcagacaga	480
ggcatgtta	gatcaattgt	ggataactgg	ccagaaaatc	atgttaaggc	tggtgtagt	540
actgatggag	agagaattct	gggtcttggg	gatctgggtg	tctatggaat	gggaattcca	600
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<210> 459

<211> 761

<212> DNA

<213> Homo Sapiens

<400> 459

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caatgacttt	tatttactta	aagccagcag	tagttcccat	tactctcata	atgttatagt	120
taaggcttga	tttagttcca	gaaaataaat	agggtaaatt	tttaatat	ccctagctct	180
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aagagtatta	cccataatag	taaatagcaa	atactttggc	aagtctgaat	tagagtacaa	420
gtgaagacat	tcacaaacac	actttttaca	tctcctggat	gtggtacggg	ctgtatgtta	480
gaattaaagc	atcacaacta	tctgattgta	gggtgctggt	gggcaatgca	atcaatcaac	540
acgtctaccc	caacagatgt	ggagaccat	ggaaaaata	catcaaccaa	agtggtcagg	600
gagaacaaaa	cccagaaaa	caccttaaa	actgaagaca	ttatctcttc	ttggctgaaa	660
aaaggggttc	cctggagcac	angaaaggtt	ttatcaaggg	aggcttctat	tcngtaatca	720
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<210> 460

<211> 876

<212> DNA

<213> Homo Sapiens

<400> 460

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gggaacctga	tgtcctcatc	ttggacgagc	caaccaataa	cctggacata	gagtctattg	540
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cccagctcat	cacagaaacc	aattgccagc	ttgtgggtgg	tggaggaaca	gagtggtagc	660
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catgggcagc	cngggcccgga	naagtgaagc	tttnttttcc	agaagntntcc	gagagaacat	780
aattgggggg	gcctaaaann	cctctggggg	cttcccttct	tttgaanaat	gctntggnt	840
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<210> 461

<211> 689

<212> DNA

<213> Homo Sapiens

<400> 461

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ggcagcaact	cctttccttt	atttcttccc	cttgtaaagg	gaaattcaag	ttcagcagca	180
ttcctttcct	gccccaaagtc	ctcaaccaga	caagaggctg	caggcaccaa	atcttgggct	240
ggataatggc	aaaggcctca	gaagctcacc	tccagctctg	agcttcaaca	gctgtttgta	300
ccagtgaagtc	agcattaaat	ccaccagaaa	agaacagcac	cacccaaaga	ctggggggca	360
gctgggcctg	aagctgtagg	gtaaatcaga	ggcaggcttc	tgagtgatga	gagtcctgag	420
acaataggcc	acataaactt	ggctggatgg	aacctcaca	taaggtggtc	acctcttggt	480
tgtttagggg	gatgccaaag	ataaggccag	ctcagttata	tgaagagaag	cagaacaaac	540
aaagtctttc	agagaaatgg	atgcaatcag	aagtgggatc	cccggncaca	tcaaggtcac	600
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<210> 462

<211> 840

<212> DNA

<213> Homo Sapiens

<400> 462

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tgttacggct	cggaggcacc	aagcaagatt	accttatgct	ggctactttg	gatgagaatg	180
aggaagtgat	agatggaggc	aaaaaaggag	caatcgatga	ccttcagcaa	ggtgaattgg	240
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ataaaaaatac	agcagaaagt	caaaggacat	cagttaataa	ggtgaaaaat	aagaataggc	420
cagaaccaca	ttctgatgag	aatggcagta	ccacaccgaa	agtaaagaaa	gataaacaga	480
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atagtcaaaa	gggagcctct	tctacctgga	tgaaaggcaa	ttgtgtcatc	ggggaccact	720
aggtgacagg	atggcagcca	ttgattcttc	ttattcagga	tgatgcccg	tcacaccact	780
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<210> 463

<211> 784

<212> DNA

<213> Homo Sapiens

<400> 463

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gtttttttgag	tggtttta	cctcttcttt	ttaaaatggt	tctttttctt	gatgatactt	120
tttgcatctc	tggtgtgtag	ccagtcacat	cgttcagcct	cccatactag	ctgttttgaga	180
cttgcatat	ctttgttagc	catggcattc	atgccaatgt	tatcaaactt	ggatcccata	240
ttttcatcca	atagatggcc	aaactcttca	gcagatacaa	ataggctgga	atcattttaag	300
tttcttttct	tttttcttgg	cccttgaaat	gagccagcaa	agtcaaaatc	atctgtacct	360
tttctcttgc	ttttcttagt	actgactttg	gagtggactt	caagttctgg	aacactctca	420
ctttcatcat	ctaacacatc	catgaatggt	cctccatctt	catcaacttc	agcaaattct	480
tcacatcca	tacttcctaa	agaaacttca	tcgtcatcca	ggttaccaag	ttcatcatca	540
ctaccttctg	aatcttcatc	taatgtgtta	tccttagctc	cttttgggtc	cttttttcacg	600

tttccagcaa	aaatccatat	catcctttnc	agagctgaaa	cagttatcat	cttcaaagt	660
gtcaatcagc	tcttcaaatt	ctttcatcat	ccacgtcctt	ctaatacttt	cttcaatctg	720
catccccgtt	tttggnntct	cttttaanca	gcaacttttt	ttatnaaacc	ctgggggaaa	780
aaac						784

<210> 464

<211> 850

<212> DNA

<213> Homo Sapiens

<400> 464

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ccacagaagc	cgcaggtcgg	ggtctgcagc	ccctgaagct	ggactaccgc	gccctggccg	180
ccgtgcccag	cgctggcagc	gtgcagaggg	taccgtctgg	agcagctgga	gggaagatgg	240
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tgcccgccaa	tgtgaagcag	gcctacaggg	ccttcgcggc	cgtgcccact	tctcaccgcg	360
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aagcgaggct	ngccctggac	ggggagacgc	tgggcgagga	ggaacaggan	gatgagcagc	660
caccctgggc	cagcccagc	cccacttaag	gcagaaccgc	gcgtcccccc	ggccctggaa	720
gtggcgcccc	ggtgcggacg	gncaaaaagct	gaacggggcc	ancaggaacc	ggttgccctt	780
canagtnccg	gaccaccgg	gacccancg	tgccctggtc	ccttgcccaa	cttcggggcc	840
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<210> 465

<211> 759

<212> DNA

<213> Homo Sapiens

<400> 465

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tcactagtta	cagtctcgcc	gaggtctcgg	ctgggggtgg	gcagttagtt	agtcacaggc	120
cagaactcct	gtgggggtctc	tttaaaaatgc	taacaccag	gttaaaagac	ttgggggcaag	180
ggtggtgctg	gagctggcag	ggccccacc	ccaagtctgg	gggaggtgcc	tgctcctcta	240
ggagggcaca	gggcccaggc	cacggcgccc	aggccttacg	gggcggcggc	tgctgcacag	300
tgccacatct	tcagggccca	cagcgccggg	tgagggcctg	cccagaagca	ccagagccac	360
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ccgcgtgccc	cggcctttct	gggacctgct	gaggaccatc	tgggctcngg	aaagcgtcct	600
tgttccaatg	acttcatact	ggctgccctt	cacagngcac	gcttntcggc	ttcagggccc	660
ggagcttttg	canggggaca	aggcaacgct	tcgggtgccc	ggtgggttcc	ggacttttga	720
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<210> 466

<211> 1240

<212> DNA

<213> Homo Sapiens

<400> 466

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gcactggaag	tacaggtcca	gggtatagct	ccccacacta	tggatttctt	acttatggtg	120

ggattacttt	ccatcctgga	actactaaat	ctaagtctgg	gatgaagcat	ggaaccatgg	180
acactgaatc	taaaaaggac	cctgaagggt	gtgacaaaag	tgatgacaaa	aacactgtaa	240
acctctttgg	gaaagttatt	gaaaccacag	agcaagatca	ggagcccagc	gaggccaccg	300
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ctcaacttgt	gagggatcta	ctagaagtca	catctggttt	gatttctgat	gacattatca	600
acatgagaaa	tgatctgtac	cagacgccct	tgcacttggc	agtgatcact	aagcaggaag	660
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ctcttcttaa	agcagcagga	gcagatcccc	tgggtgggaga	ctttgagccc	ttctatgacc	1140
tggatgactc	ttgggaaaat	gcaggaaaaag	gattgaagga	gttggnctgg	aancacgect	1200
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<210> 467

<211> 885

<212> DNA

<213> Homo Sapiens

<400> 467

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gtacagggtcc	agggtatagc	ttcccacact	atggatttcc	tacttatggg	gggattactt	120
tccatcctgg	aactactaaa	tctaagtctg	ggatgaagca	tggaaacctg	gacactgaat	180
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gtgagggtcac	tctaactgat	gcaacaggaa	caaaagaaga	gagtgtctgga	gttcaggata	360
acctctttct	agagaaggct	atgcagcttg	caaagaggca	tgccaatgcc	cttttcgact	420
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tttgacccta	gcttgcccaa	agaaggacat	gataaagtc	tcaagtatct	tacttaagcn	780
caaaaanggc	agcactactt	tnttgaccac	ccccaacggc	ggacggtctt	gaatgccatt	840
catttaagcc	atgatgagcc	ataagcctgg	catggtttgc	tgctg		885

<210> 468

<211> 748

<212> DNA

<213> Homo Sapiens

<400> 468

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atcaagtgc	tctcatttta	aaatatctct	tttcttaacc	cttaatttga	atgcaaaatg	120
atgctgtggt	cagaaggaat	gccagggtggc	gaccgtgata	cctttaatga	caataggaac	180
gtagcagagg	gacaacagca	atgacaacag	aaagcagctg	tgatccagca	gcagctggca	240
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atactatctg	taagtgaacc	aaactaaaat	tcatttatga	accaagaaaag	gaagccaagt	360
tgaaaaggtc	tcgagttaaa	tcgagaatga	ttcaggcggg	ccggctctct	gagcaccttt	420

ggatgcactt	cagcttctgt	cttgtggaaa	cgcggtggaat	tttagggcctt	tggtttacac	480
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ctcgnctatt	tgctgccttg	tggaggcagg	cgaaanaagc	agcgagtggg	ccctgaaaag	720
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<210> 469

<211> 770

<212> DNA

<213> Homo Sapiens

<400> 469

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<210> 470

<211> 892

<212> DNA

<213> Homo Sapiens

<400> 470

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<210> 471

<211> 759

<212> DNA

<213> Homo Sapiens

<400> 471

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gctcgtctat	ttgctgcctt	gtggaggcag	gcgananagg	caacgagtgg	gccctgaaaa	720
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<210> 472

<211> 852

<212> DNA

<213> Homo Sapiens

<400> 472

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<210> 473

<211> 804

<212> DNA

<213> Homo Sapiens

<400> 473

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tgaaaaggtc	tcgagttaaa	tcgagaatga	ttcaggcggg	cgggctctct	gagcaccttt	420
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aatcatgggg	cattttgttg	agagttagca	gtgaggcacc	acttgggtcaa	gagactcggt	600
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tcggaactcg	ncatatttgc	gncttgtgga	agcaggcnaa	nanaagcanc	gaantggggc	720
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804

<210> 474

<211> 819

<212> DNA

<213> Homo Sapiens

<400> 474

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gagcccattg	aaataccatc	ggaagacgat	gggacggtgc	tgctctccac	ggttacagcc	180
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gttgtcaact	atccaaaaga	taacaaaaga	aaaatggatg	agacagatgc	ttcatcagca	360
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aaaacaaccg	aacaggacct	gaaagagtat	tttagtacct	ttggagaagt	tcttatggtg	480
caggtcaaga	aagatcttaa	gactggtcat	tcaaaggggt	ttggctttgt	tcgtttttacg	540
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gactgcaaac	ttcctaattc	taagcaaagc	caagatgagc	ctttgagaag	cagaaaagtg	660
tttgtggggc	gctgtcagag	gacatgactg	aggatgaagc	tgcgggagtt	cttcttttca	720
gtancggggg	tgtgatggat	ggcttcatn	ccaagccat	tcagggcctt	tggttttgg	780
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<210> 475

<211> 721

<212> DNA

<213> Homo Sapiens

<400> 475

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ttccaccctt	ctttgagaca	cctgagctca	ctggtgaact	ctgcttcaag	tcctcctgca	180
aagcacacca	caagctcagt	ccatgtttctc	agcccatcag	cttcagttca	cattgccaca	240
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gaacaaaaaac	tcacttaaaa	gtcttccaac	agatgtggat	gtcctttgaa	tgcaaaaaaac	420
attcgtacat	tatttgcata	cattgctctc	tgacactctc	ctcaccaaaag	ccacaggatt	480
gagagacaca	tctcgccaag	ttaaaaaata	tccattatgc	accaccaagt	ctctgcacgc	540
gctctctcct	tttctcgctc	atctagcct	tctatgcttc	ggcaccacca	tcaatcccac	600
acaagggtttc	aaaagttcag	acagccttct	ggttccatat	cacaggcctt	gcgttcatag	660
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<210> 476

<211> 442

<212> DNA

<213> Homo Sapiens

<400> 476

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nttncntatc	agtaccagaa	gagaccnenc	nccntncagc	nttencagca	gtngncaaag	300
gggtaggggn	agtccangta	tcatttnant	taccacattc	atctaagggg	ggttatctaa	360

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nttcgnccat nattggctat ca 442

<210> 477

<211> 878

<212> DNA

<213> Homo Sapiens

<400> 477

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ggtacatttg	ccagatgatc	agaatgccc	gtctcttttg	tggaaaagga	ctttgatcat	840
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<210> 478

<211> 768

<212> DNA

<213> Homo Sapiens

<400> 478

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ttcaaaatct	tcttagggta	aaataaatac	ccgtatctat	gcagtaccat	aaacatgtta	180
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ttcaaaagaa	aaaaaaaaat	tttcactttg	gccaatgcaa	gaacaaatac	caattaagtc	480
tgggtatcag	gtgtcaatgc	atgacagggtg	atgaatccat	ttgacttgag	acaacttttc	540
aaataagttt	atttgaagca	aaataaacta	ctgccagaaa	actttatgaa	agttccatct	600
caaaagggtc	aaaaaagggg	aattaactgc	tatgaattct	ttgcattcag	ggcgtcaaaa	660
gacgccggcc	tgnggatgcc	gtgatgacca	attcttgaat	gagaaagcat	gtagaccgna	720
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<210> 479

<211> 815

<212> DNA

<213> Homo Sapiens

<400> 479

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tgagaacgat	gagcccattg	aaataccatc	ggaagacgat	gggacgggtg	tgctctccac	180
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tcttatgggtg	caggtcaaga	aagatcttaa	gactgggtcat	tcaaaggggt	ttggccttgt	540
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cagaaaagtg	tttgtggggg	cgctgtacag	angacatgac	tgangataan	cttcnggagt	720
tcttttttta	ataccgggat	gtgatggatg	cttcatttcc	caacccattc	agggcctttg	780
nctttggtac	catttgcaga	tgatcanatt	gccca			815

<210> 480

<211> 812

<212> DNA

<213> Homo Sapiens

<400> 480

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cttcaaaatc	ttcttagggg	aaaataaata	ccggtatcta	tgcagtacca	taaacaagt	180
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aaaacaaaga	ccccatatta	tttaaaatcc	agtttattta	agaatttncc	accntggaca	720
acttcttatt	aaaaaggcnt	tccaggccca	nggaccacag	aaactgnang	ccaaacangc	780
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<210> 481

<211> 1127

<212> DNA

<213> Homo Sapiens

<400> 481

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agccacagac	aagcccagaa	tatggccagg	ggatcaatcc	gattagccga	ctggcccaga	480
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aataacatct cttcaggcca cgtaccccat ggacctctca cgagaccctn tgagcaactg 1080
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<210> 482

<211> 773

<212> DNA

<213> Homo Sapiens

<400> 482

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cccagatcca	gcaggcaaaa	aaggagaagg	agccagagta	cacgctcctc	acagagcgag	180
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caccataaaa	gaaaccaggg	gatggaagaa	aagtaacctt	ttttgaacct	ggctctgggg	420
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ttaaagaata	acatctcttc	aggccacgta	ccccatggac	ctctcacgag	accctntgag	720
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<210> 483

<211> 794

<212> DNA

<213> Homo Sapiens

<400> 483

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ggcaagttgg	gaggggacca	acctagcagt	agnggcattt	ganaataaat	tancaaaaaa	180
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<210> 484

<211> 788

<212> DNA

<213> Homo Sapiens

<400> 484

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gttcaaagg	ccagagactt	ctgagtatgt	tgatggatgt	aaaaacatgc	aatgaggtgg	180
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tggtgacaat	ccttaccctt	tccanggagg	acaccctta	ccacagtctg	gactcacttt	780
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<210> 485

<211> 430

<212> DNA

<213> Homo Sapiens

<400> 485

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<210> 486

<211> 831

<212> DNA

<213> Homo Sapiens

<400> 486

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<210> 487

<211> 728

<212> DNA

<213> Homo Sapiens

<400> 487

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caggtgcctg	ccaccacgcc	tggttaattt	ttgtattttt	ggtagagacg	gggtttccac	180

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<210> 488

<211> 788

<212> DNA

<213> Homo Sapiens

<400> 488

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tggaattcac	ccaggaagaa	tggtaccatg	tcgaccctgc	tcagaggagc	ttatacaggg	180
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gtgaaaattc	tagattgaac	accaatttgg	ttacacaact	gaacattcct	gcaagaataa	600
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agaataatat	tcttgcaaaa	aagaaaccct	tttagtgnga	taatgtagaa	aagnctttan	720
tcatagatca	tcgnttacta	aaccttgaga	aaacccctta	anggaaaagg	gagctttcct	780
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<210> 489

<211> 875

<212> DNA

<213> Homo Sapiens

<400> 489

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gttaattttt	ttaatgggtga	aatcttttct	ttgcacataa	aatgagccag	tgcatgttgc	180
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cnaatggaaa	atgggttggg	cctagttgga	actaaattct	tttgaatggg	ggactttcct	840
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<210> 490

<211> 844
 <212> DNA
 <213> Homo Sapiens

<400> 490

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aaacaaaacc	catagtcaag	ccacagacaa	gccagaata	tggccagggg	atcaatccga	300
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cagaggagaa	gacaccata	aagaaaccag	gggatggaag	aaaagtaacc	ttttttgaac	600
ctgctcttgg	ggatgaaaa	gggactagta	ataaagagga	tgagttcagg	atgccttacc	660
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ggga						844

<210> 491
 <211> 825
 <212> DNA
 <213> Homo Sapiens

<400> 491

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ggcaagtgg	gaggggacca	acctagcagt	agtggcattt	gagaataaat	taacaaaaaa	180
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aaaaattcca	gcgtaaacaa	tgaatggaag	cagtacttaa	ctcgcagggc	taccaggctt	300
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caaaagcaac	acagctgtat	acagaaaagt	aggctattct	tttcagccct	aatggagatg	420
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gatcatatcc	tgtagtgtag	tgaaagctaa	gtcctcaaga	gccatatgta	tagatacaca	540
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gtttcagctg	aaccagangg	cccccaattt	gcatactgg	aactgncctg	ggtttagcca	780
aggaaattaa	aaaagnctta	accccttcc	cctgggattt	gaacc		825

<210> 492
 <211> 946
 <212> DNA
 <213> Homo Sapiens

<400> 492

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gagaatccga	agaagaaaat	ctcaataaat	ctgaaataag	tcaagtgttt	gagattgcac	180
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cgcgccgcag	ggagtttgtg	atgcagggtga	agggttgaaa	ccacacttgc	agaaggaacg	600
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attaaggaaa	ccangggatg	gaagaaaagt	ancnttttga	anctggctnt	tgaggattaaa	780
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gctggaaatc	tttccatggg	ggccgaggtc	ncccagcttt	taggagttat	canggcctnt	900
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<210> 493

<211> 804

<212> DNA

<213> Homo Sapiens

<400> 493

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ttcctgattt	tgcattgttct	cattcccaaa	gtagtctacc	ttagtttaca	ctcaaaggta	180
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cattatagag	ccgtttgatt	ccatcataga	agtcatccac	ttccatttcc	tctactttgc	360
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gtaagagaaa	gcccaatccn	ggaatggagt	tcntccattt	tcagactaac	cctgggcncn	720
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<210> 494

<211> 856

<212> DNA

<213> Homo Sapiens

<400> 494

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cgccaacaga	ttaaagccaa	acttcgtggg	gaaaagaaag	aagctaatac	ttctgaagga	540
caagaaggaa	gtgaagaggc	tgacatgagg	cgcaaaaaaa	atcgaatcac	tgaaggccca	600
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<210> 495

<211> 757

<212> DNA

<213> Homo Sapiens

<400> 495

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agataagatt	ttatttttca	aattacatat	tatgccaacc	agcctgcttt	ggactcagag	180
gttcaaaaac	tttgctttta	ttacgaagaa	catntggact	gtagacacct	ntaacgaaac	240
caggttatac	ttggcatatt	gngattgaag	ctgtgtgac	aacatcttaa	tgacctaaact	300
aaatcctntc	ataacagaaa	gaagttcaac	aggcaaacat	ttccctccct	aggatcctag	360
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tattctttca	taatcaaate	tttcaatgga	tttctaagac	tggnttctac	agcctgngng	660
ctagttccag	gggacacact	gattgtaaaa	nggacttggg	ggaaatntaa	aactttaagg	720
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<210> 496

<211> 1759

<212> DNA

<213> Homo Sapiens

<400> 496

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accaggaaga	gcagctgaca	gtgaattcaa	aggcattaga	gattcttgac	aagatttctc	180
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<210> 497
 <211> 842
 <212> DNA
 <213> Homo Sapiens

<400> 497
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 tcactgctgg agagaaggcc atacaaccgg aaccgggcca tgaaggaagc acttgagaag 780
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<210> 498
 <211> 707
 <212> DNA
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<210> 499
 <211> 772
 <212> DNA
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<400> 499
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aatacatggn	ccaaatggag	aagaagttgg	aggangaaag	ggaaaaccnt	ntcagagagc	720
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<210> 500

<211> 787

<212> DNA

<213> Homo Sapiens

<400> 500

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<211> 886

<212> DNA

<213> Homo Sapiens

<400> 501

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<211> 626

<212> DNA

<213> Homo Sapiens

<400> 502

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<210> 503

<211> 884

<212> DNA

<213> Homo Sapiens

<400> 503

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<211> 612

<212> DNA

<213> Homo Sapiens

<400> 504

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<210> 505

<211> 2215

<212> DNA

<213> Homo Sapiens

<400> 505

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<210> 506

<211> 742

<212> DNA

<213> Homo Sapiens

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<211> 735

<212> DNA

<213> Homo Sapiens

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<210> 508

<211> 666

<212> DNA

<213> Homo Sapiens

<400> 508

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<210> 509

<211> 818

<212> DNA

<213> Homo Sapiens

<400> 509

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<210> 510

<211> 651

<212> DNA

<213> Homo Sapiens

<400> 510

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<210> 511

<211> 712

<212> DNA

<213> Homo Sapiens

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<210> 512

<211> 850

<212> DNA

<213> Homo Sapiens

<400> 512

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<211> 727

<212> DNA

<213> Homo Sapiens

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<211> 877

<212> DNA

<213> Homo Sapiens

<400> 514

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<211> 685

<212> DNA

<213> Homo Sapiens

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ggccgggtct	gcattaaata	gaagaggcct	ctttagtgtc	catctcgaaa	ctcttgaagg	480
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tnctgttctc	ttccgaancc	atttctttcc	tgnctgtgcc	natgaatctt	gggcaaattg	600
cgcgaacccc	atcttctctt	ttcacccac	cacctggnct	cattctcctg	ctcttcaaaa	660
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<210> 516

<211> 790

<212> DNA

<213> Homo Sapiens

<400> 516

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tgaagctgaa	acattacaag	atctttgagg	gaatgccagt	aactttcaca	tgtagagtgg	300
ctggaaatcc	aaagccaaaag	atctattggt	ttaaagatgg	gaagcagatc	tctccaaaaga	360
gtgatcacta	caccattcaa	agagatctcg	atgggacctg	ctccctccat	accacagcct	420
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ctgttcaaga	aggaaaactc	tgcagaatgg	actgcaaagt	cagtgggtta	ccaaccccca	720
gatctaagct	ggcaactaga	tggaaagccc	gtacgccttg	acagtgtctc	caagaaagcc	780
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<210> 517

<211> 747

<212> DNA

<213> Homo Sapiens

<400> 517

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agtgctgtga	gtgagtgatt	cattttcttt	cttccaaaat	atctgaggtg	gtggcactcc	480
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ctcaataaac	acagggggtt	tgtgtgcttc	tttagcagca	accacaagct	ccaggtgaa	600
tgagttctgt	cctgctcggt	tggtagctat	acatgtgtag	atgccggcat	cacgtgacgt	660
gactggctct	atgatcagag	agtgcacccc	gttctttacg	caccagcatc	ttgggagccc	720
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<210> 518

<211> 926

<212> DNA

<213> Homo Sapiens

<400> 518

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ctgtggaaca	aaaagaaggc	gctttctcta	attttcccat	atctgaagaa	actattaac	420
ttctcaaagg	ccgaggagt	accttcctat	ttcctataca	agcaaagaca	ttccatcatg	480
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tcagtgcacat	cacaaaaaaa	gcttgtcagt	gggcttgggt	tttatggtgg	aacttcctat	720
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<210> 519

<211> 789

<212> DNA

<213> Homo Sapiens

<400> 519

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gcctacttac	aaataaagct	atggagccac	cttatacatg	tgaaattcct	taaaaccctg	180
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agattagttt	gaaatcttgt	ttcaaaacat	tgctcagtat	taagtctcag	tagacaaata	420
ataggaccac	atgagaaact	gttcggcagg	tggctgagga	aaccttaact	tccaaaggct	480
caaagtggtc	ctccagagac	tgttacactc	ccttaggtat	ttatttcagg	gaaggacact	540
attaaggggac	acttttgagt	ataaagacag	gtgaactcac	aaagtatagg	cagatcatgc	600
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cacctttcaa	aanggaaaaa	ctggatgaag	taacnnntaa	agntataaat	ggataatgga	720
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<210> 520

<211> 827

<212> DNA

<213> Homo Sapiens

<400> 520

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aactttttca	atacctacac	atgggagatc	taaagagtac	aatatatatta	agacttctaa	180
ggaattgttt	tctcctcact	aataaagcat	gccctgacta	aagagaagtc	ctgtaggcac	240
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tggaccttac	agttctcact	gcccttggac	tccagtcag	ctttggggct	ggggacaagt	360
cggcctcgct	tgacctcag	gccctctctg	gggctgtcag	tcggacttct	ctcaggaaga	420
ttattgactg	ggacggattt	cgtggtgggt	tctcggagga	tgggtgcctga	atctactggg	480
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agtaacctcg	ngncttctgc	anggtgaata	ccactcatga	ctgntttctt	gcttttttta	780
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<210> 521

<211> 710

<212> DNA

<213> Homo Sapiens

<400> 521

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aactttttca	atacctacac	atgggagatc	taaagagtac	aatatatatta	agacttctaa	180
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cggcctcgct	tgacctcag	gccctctctg	gggctgtcag	tcggacttct	ctcaggaaga	420
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cgggggctgg	tccgaagttg	ccatgggttg	ntcttcagg	atatatgggc	taagnctttc	660
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<210> 522

<211> 638

<212> DNA

<213> Homo Sapiens

<400> 522

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cttacagttc	tcactgccct	tggactccag	tccagctttg	gggctgggga	caagtcggcc	360
tcgcttgacc	ctnaggccct	ctctggggct	gtcagtcgga	cttctntcag	gaagattatt	420
gactgggacg	gatttcgtgg	tgggttctcg	gaggatgggtg	cctgaatcta	ctgggctccg	480
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aagattttct	ttgccgagac	ttantggggg	atagcgctaa	cttctggngc	agccangcgg	600
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<210> 523

<211> 833

<212> DNA

<213> Homo Sapiens

<400> 523

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cagcagtgga	ctggtaccaaa	caaagacaag	gctgaattca	ttctgcctaa	tgggtcaagaa	480
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ctggaagggt	tggaaaagct	caaacatcta	gactttctga	agcagccact	ggccacccaa	660
aaggatctca	ctggccaggt	gcccactcct	gtggtgaaac	aaacaaaact	gaacagaggg	720
cttgatagcc	gagaaagtct	gaagcccagc	cgcaaaanca	ctttctagca	aatccggcgg	780
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<210> 524

<211> 766

<212> DNA

<213> Homo Sapiens

<400> 524

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aacctttcag	gaatggtgga	ccggggtgct	ggtcccagga	aacaggactc	ggatggattt	720
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<210> 525

<211> 847

<212> DNA

<213> Homo Sapiens

<400> 525

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gacaaaagat	ccttcatcac	cgaagtgcag	ttttagaac	agtggctcct	atcaaccttt	360
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<210> 526

<211> 746

<212> DNA

<213> Homo Sapiens

<400> 526

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<210> 527

<211> 837

<212> DNA

<213> Homo Sapiens

<400> 527

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<210> 528

<211> 822

<212> DNA

<213> Homo Sapiens

<400> 528

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<210> 529

<211> 842

<212> DNA

<213> Homo Sapiens

<400> 529

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<211> 815

<212> DNA

<213> Homo Sapiens

<400> 530

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 <212> DNA
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<211> 789

<212> DNA

<213> Homo Sapiens

<400> 534

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<211> 802

<212> DNA

<213> Homo Sapiens

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<211> 901

<212> DNA

<213> Homo Sapiens

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<211> 761

<212> DNA

<213> Homo Sapiens

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<211> 869

<212> DNA

<213> Homo Sapiens

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<211> 830

<212> DNA

<213> Homo Sapiens

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<212> DNA

<213> Homo Sapiens

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tggagtctga ctctagctga gcagactcct ggtgtatggt ttcagaaatg gcttgaagtt      780
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852

<210> 545

<211> 414

<212> PRT

<213> Homo Sapiens

<400> 545

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          20          25          30
Tyr Gln Arg Thr Cys Glu Asp Leu Lys Glu Gln Leu Lys His Lys Glu
          35          40          45
Phe Leu Leu Ala Ala Asn Thr Cys Asn Arg Val Gly Gly Leu Cys Leu
          50          55          60
Lys Cys Ala Gln His Glu Ala Val Leu Ser Gln Thr His Thr Asn Val
65          70          75          80
His Met Gln Thr Ile Glu Arg Leu Val Lys Glu Arg Asp Asp Leu Met
          85          90          95
Ser Ala Leu Val Ser Val Arg Ser Ser Leu Ala Asp Thr Gln Gln Arg
          100          105          110
Glu Ala Ser Ala Tyr Glu Gln Val Lys Gln Val Leu Gln Ile Ser Glu
          115          120          125
Glu Ala Asn Phe Glu Lys Thr Lys Ala Leu Ile Gln Cys Asp Gln Leu
          130          135          140
Arg Lys Glu Leu Glu Arg Gln Ala Glu Arg Leu Glu Lys Glu Leu Ala
145          150          155          160
Ser Gln Gln Glu Lys Arg Ala Ile Glu Lys Asp Met Met Lys Lys Glu
          165          170          175
Ile Thr Lys Glu Arg Glu Tyr Met Gly Ser Lys Met Leu Ile Leu Ser
          180          185          190
Gln Asn Ile Ala Gln Leu Glu Ala Gln Val Glu Lys Val Thr Lys Glu
          195          200          205
Lys Ile Ser Ala Ile Asn Gln Leu Glu Glu Ile Gln Ser Gln Leu Ala
210          215          220
Ser Arg Glu Met Asp Val Thr Lys Val Cys Gly Glu Met Arg Tyr Gln
225          230          235          240
Leu Asn Lys Thr Asn Met Glu Lys Asp Glu Ala Glu Lys Glu His Arg
          245          250          255

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Glu Phe Arg Ala Lys Thr Asn Arg Asp Leu Glu Ile Lys Asp Gln Glu
 260 265 270
 Ile Glu Lys Leu Arg Ile Glu Leu Asp Glu Ser Lys Gln His Leu Glu
 275 280 285
 Gln Glu Gln Gln Lys Ala Ala Leu Ala Arg Glu Glu Cys Leu Arg Leu
 290 295 300
 Thr Glu Leu Leu Gly Glu Ser Glu His Gln Leu His Leu Thr Arg Ser
 305 310 315 320
 Glu Ile Ala Gln Leu Ser Gln Glu Lys Arg Tyr Thr Tyr Asp Lys Leu
 325 330 335
 Gly Lys Leu Gln Arg Arg Asn Glu Glu Leu Glu Glu Gln Cys Val Gln
 340 345 350
 His Gly Arg Val His Glu Thr Met Lys Gln Arg Leu Arg Gln Leu Asp
 355 360 365
 Lys His Ser Gln Ala Thr Ala Gln Gln Leu Val Gln Leu Leu Ser Lys
 370 375 380
 Gln Asn Gln Leu Leu Leu Glu Arg Gln Ser Leu Ser Glu Glu Val Asp
 385 390 395 400
 Arg Leu Arg Thr Gln Leu Pro Ser Met Pro Gln Ser Asp Cys
 405 410

<210> 546
 <211> 2885
 <212> DNA
 <213> Homo Sapiens

<400> 546

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gagcggcccc	cctgggacgc	ctccctccta	caaactgcct	ttgcctgggc	cctacgacag	180
tgcagacgac	ttccccctcc	gcaaaacagc	ctctgaaccc	aacttgaaag	tgcgttcaag	240
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gtccgtgtgt	aacagcgcac	ccggctccgg	ccccagctct	cccaacagct	cccacagcac	420
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<210> 547

<211> 897

<212> PRT

<213> Homo Sapiens

<400> 547

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20          25          30
Leu Asp Gln Ser Ser Pro Pro Gln Ser Gly Pro Pro Gly Thr Pro Pro
35          40          45
Ser Tyr Lys Leu Pro Leu Pro Gly Pro Tyr Asp Ser Arg Asp Asp Phe
50          55          60
Pro Leu Arg Lys Thr Ala Ser Glu Pro Asn Leu Lys Val Arg Ser Arg
65          70          75          80
Leu Lys Gln Lys Val Ala Glu Arg Arg Ser Ser Pro Leu Leu Arg Arg
85          90          95
Lys Asp Gly Thr Val Ile Ser Thr Phe Lys Lys Arg Ala Val Glu Ile
100         105         110
Thr Gly Ala Gly Pro Gly Ala Ser Ser Val Cys Asn Ser Ala Pro Gly
115         120         125
Ser Gly Pro Ser Ser Pro Asn Ser Ser His Ser Thr Ile Ala Glu Asn
130         135         140
Gly Phe Thr Gly Ser Val Pro Asn Ile Pro Thr Glu Met Leu Pro Gln
145         150         155         160
His Arg Ala Leu Pro Leu Asp Ser Ser Pro Asn Gln Phe Ser Leu Tyr
165         170         175
Thr Ser Pro Ser Leu Pro Asn Ile Ser Leu Gly Leu Gln Ala Thr Val
180         185         190
Thr Val Thr Asn Ser His Leu Thr Ala Ser Pro Lys Leu Ser Thr Gln
195         200         205
Gln Glu Ala Glu Arg Gln Ala Leu Gln Ser Leu Arg Gln Gly Gly Thr

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210 215 220
 Leu Thr Gly Lys Phe Met Ser Thr Ser Ser Ile Pro Gly Cys Leu Leu
 225 230 235 240
 Gly Val Ala Leu Glu Gly Asp Gly Ser Pro His Gly His Ala Ser Leu
 245 250 255
 Leu Gln His Val Leu Leu Leu Glu Gln Ala Arg Gln Gln Ser Thr Leu
 260 265 270
 Ile Ala Val Pro Leu His Gly Gln Ser Pro Leu Val Thr Gly Glu Arg
 275 280 285
 Val Ala Thr Ser Met Arg Thr Val Gly Lys Leu Pro Arg His Arg Pro
 290 295 300
 Leu Ser Arg Thr Gln Ser Ser Pro Leu Pro Gln Ser Pro Gln Ala Leu
 305 310 315 320
 Gln Gln Leu Val Met Gln Gln Gln His Gln Gln Phe Leu Glu Lys Gln
 325 330 335
 Lys Gln Gln Gln Leu Gln Leu Gly Lys Ile Leu Thr Lys Thr Gly Glu
 340 345 350
 Leu Pro Arg Gln Pro Thr Thr His Pro Glu Glu Thr Glu Glu Glu Leu
 355 360 365
 Thr Glu Gln Gln Glu Val Leu Leu Gly Glu Gly Ala Leu Thr Met Pro
 370 375 380
 Arg Glu Gly Ser Thr Glu Ser Glu Ser Thr Gln Glu Asp Leu Glu Glu
 385 390 395 400
 Glu Asp Glu Glu Glu Asp Gly Glu Glu Glu Glu Asp Cys Ile Gln Val
 405 410 415
 Lys Asp Glu Glu Gly Glu Ser Gly Ala Glu Glu Gly Pro Asp Leu Glu
 420 425 430
 Glu Pro Gly Ala Gly Tyr Lys Lys Leu Phe Ser Asp Ala Gln Pro Leu
 435 440 445
 Gln Pro Leu Gln Val Tyr Gln Ala Pro Leu Ser Leu Ala Thr Val Pro
 450 455 460
 His Gln Ala Leu Gly Arg Thr Gln Ser Ser Pro Ala Ala Pro Gly Gly
 465 470 475 480
 Met Lys Asn Pro Pro Asp Gln Pro Val Lys His Leu Phe Thr Thr Ser
 485 490 495
 Val Val Tyr Asp Thr Phe Met Leu Lys His Gln Cys Met Cys Gly Asn
 500 505 510
 Thr His Val His Pro Glu His Ala Gly Arg Ile Gln Ser Ile Trp Ser
 515 520 525
 Arg Leu Gln Glu Thr Gly Leu Leu Ser Lys Cys Glu Arg Ile Arg Gly
 530 535 540
 Arg Lys Ala Thr Leu Asp Glu Ile Gln Thr Val His Ser Glu Tyr His
 545 550 555 560
 Thr Leu Leu Tyr Gly Thr Ser Pro Leu Asn Arg Gln Lys Leu Asp Ser
 565 570 575
 Lys Lys Leu Leu Gly Pro Ile Ser Gln Lys Met Tyr Ala Val Leu Pro
 580 585 590
 Cys Gly Gly Ile Gly Val Asp Ser Asp Thr Val Trp Asn Glu Met His
 595 600 605
 Ser Ser Ser Ala Val Arg Met Ala Val Gly Cys Leu Leu Glu Leu Ala
 610 615 620
 Phe Lys Val Ala Ala Gly Glu Leu Lys Asn Gly Phe Ala Ile Ile Arg
 625 630 635 640
 Pro Pro Gly His His Ala Glu Glu Ser Thr Ala Met Gly Phe Cys Phe
 645 650 655

Phe Asn Ser Val Ala Ile Thr Ala Lys Leu Leu Gln Gln Lys Leu Asn
 660 665 670
 Val Gly Lys Val Leu Ile Val Asp Trp Asp Ile His His Gly Asn Gly
 675 680 685
 Thr Gln Gln Ala Phe Tyr Asn Asp Pro Ser Val Leu Tyr Ile Ser Leu
 690 695 700
 His Arg Tyr Asp Asn Gly Asn Phe Phe Pro Gly Ser Gly Ala Pro Glu
 705 710 715 720
 Glu Val Gly Gly Gly Pro Gly Val Gly Tyr Asn Val Asn Val Ala Trp
 725 730 735
 Thr Gly Gly Val Asp Pro Pro Ile Gly Asp Val Glu Tyr Leu Thr Ala
 740 745 750
 Phe Arg Thr Val Val Met Pro Ile Ala His Glu Phe Ser Pro Asp Val
 755 760 765
 Val Leu Val Ser Ala Gly Phe Asp Ala Val Glu Gly His Leu Ser Pro
 770 775 780
 Leu Gly Gly Tyr Ser Val Thr Ala Arg Cys Phe Gly His Leu Thr Arg
 785 790 795 800
 Gln Leu Met Thr Leu Ala Gly Gly Arg Val Val Leu Ala Leu Glu Gly
 805 810 815
 Gly His Asp Leu Thr Ala Ile Cys Asp Ala Ser Glu Ala Cys Val Ser
 820 825 830
 Ala Leu Leu Ser Val Lys Leu Gln Pro Leu Asp Glu Ala Val Leu Gln
 835 840 845
 Gln Lys Pro Asn Ile Asn Ala Val Ala Thr Leu Glu Lys Val Ile Glu
 850 855 860
 Ile Gln Ser Lys His Trp Ser Cys Val Gln Lys Phe Ala Ala Gly Leu
 865 870 875 880
 Gly Arg Ser Leu Arg Gly Ala Gln Ala Gly Glu Thr Glu Glu Ala Glu
 885 890 895
 Met

<210> 548
 <211> 1298
 <212> DNA
 <213> Homo Sapiens

<400> 548
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 ccgcactaga agaacgaaga aaagaggaaa gaaggaggag gagaaagaag aagaacaagg 900
 agaagaagaa agaagaaggg agaaggagaa gaaaagaagg agaagaggaa aaggaagaag 960

gagaaagaaa aggagaagga aaaggaaaag aaggagaaga aagaagaact aagaagaagg 1020
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<210> 549

<211> 236

<212> PRT

<213> Homo Sapiens

<400> 549

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 20 25 30
 Ser Glu Asp Glu Gly Asp Asn Asp Gly Glu Arg Lys His Lys Leu Leu
 35 40 45
 Glu Ala Ile Ser Ser Leu Asp Gly Lys Asn Arg Arg Lys Leu Ala Arg
 50 55 60
 Ser Glu Ala Ser Leu Lys Val Ser Glu Phe Asn Val Ser Ser Glu Gly
 65 70 75 80
 Ser Gly Glu Lys Leu Val Leu Ala Asp Leu Leu Glu Pro Val Lys Thr
 85 90 95
 Ser Ser Ser Leu Ala Thr Val Lys Lys Gln Leu Ser Arg Val Ser Lys
 100 105 110
 Thr Val Glu Leu Pro Leu Asn Lys Glu Glu Ile Glu Arg Ile His Arg
 115 120 125
 Glu Ile Ala Phe Asn Lys Thr His Lys Ser Ser Pro Asn Gly Thr Leu
 130 135 140
 Ser Ser Val Leu Lys Asn Arg Gln Ala Glu Gln Leu Val Phe Pro Leu
 145 150 155 160
 Glu Lys Glu Glu Pro Ala Ile Ala Pro Ile Glu His Val Leu Ser Gly
 165 170 175
 Trp Lys Ala Arg Thr Pro Leu Glu Gln Glu Ile Phe Asn Leu Leu His
 180 185 190
 Lys Asn Lys Gln Pro Val Thr Asp Pro Leu Leu Thr Pro Val Glu Lys
 195 200 205
 Ala Ser Leu Arg Ala Met Ser Leu Glu Glu Ala Lys Met Arg Arg Ala
 210 215 220
 Glu Leu Gln Arg Ala Arg Ala Leu Gln Ser Tyr Tyr
 225 230 235

<210> 550

<211> 2236

<212> DNA

<213> Homo Sapiens

<400> 550

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 ttccggcata aggtggattt tctgattgaa aatgatgcag agaaggacta tctctatgat 180
 gtgctgcgaa tgtaccacca gaccatggac gtggccgtgc tcgtgggaga cctgaagctg 240
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<210> 551

<211> 652

<212> PRT

<213> Homo Sapiens

<400> 551

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20 25 30
Tyr His Gln Thr Met Asp Val Ala Val Leu Val Gly Asp Leu Lys Leu
35 40 45
Val Ile Asn Glu Pro Ser Arg Leu Pro Leu Phe Asp Ala Ile Arg Pro
50 55 60
Leu Ile Pro Leu Lys His Gln Val Glu Tyr Asp Gln Leu Thr Pro Arg
65 70 75 80
Arg Ser Arg Lys Leu Lys Glu Val Arg Leu Asp Arg Leu His Pro Glu
85 90 95
Gly Leu Gly Leu Ser Val Arg Gly Gly Leu Glu Phe Gly Cys Gly Leu
100 105 110
Phe Ile Ser His Leu Ile Lys Gly Gly Gln Ala Asp Ser Val Gly Leu

115	120	125
Gln Val Gly Asp Glu Ile	Val Arg Ile Asn Gly Tyr	Ser Ile Ser Ser
130	135	140
Cys Thr His Glu Glu Val	Ile Asn Leu Ile Arg Thr	Lys Lys Thr Val
145	150	155
Ser Ile Lys Val Arg His	Ile Gly Leu Ile Pro Val	Lys Ser Ser Pro
165	170	175
Asp Glu Pro Leu Thr Trp	Gln Tyr Val Asp Gln Phe	Val Ser Glu Ser
180	185	190
Gly Gly Val Arg Gly Ser	Leu Gly Ser Pro Gly Asn	Arg Glu Asn Lys
195	200	205
Glu Lys Lys Val Phe Ile	Ser Leu Val Gly Ser Arg	Gly Leu Gly Cys
210	215	220
Ser Ile Ser Ser Gly Pro	Ile Gln Lys Pro Gly Ile	Phe Ile Ser His
225	230	235
Val Lys Pro Gly Ser Leu	Ser Ala Glu Val Gly Leu	Glu Ile Gly Asp
245	250	255
Gln Ile Val Glu Val Asn	Gly Val Asp Phe Ser Asn	Leu Asp His Lys
260	265	270
Glu Ala Val Asn Val Leu	Lys Asn Ser Arg Ser Leu	Thr Ile Ser Ile
275	280	285
Val Ala Ala Ala Gly Arg	Glu Leu Phe Met Thr Asp	Arg Glu Arg Leu
290	295	300
Ala Glu Ala Arg Gln Arg	Glu Leu Gln Arg Gln Glu	Leu Leu Met Gln
305	310	315
Lys Arg Leu Ala Met Glu	Ser Asn Lys Ile Leu Gln	Glu Gln Gln Glu
325	330	335
Met Glu Arg Gln Arg Arg	Lys Glu Ile Ala Gln Lys	Ala Ala Glu Glu
340	345	350
Asn Glu Arg Tyr Arg Lys	Glu Met Glu Gln Ile Val	Glu Glu Glu Glu
355	360	365
Lys Phe Lys Lys Gln Trp	Glu Glu Asp Trp Gly Ser	Lys Glu Gln Leu
370	375	380
Leu Leu Pro Lys Thr Ile	Thr Ala Glu Val His Pro	Val Pro Leu Arg
385	390	395
Lys Pro Lys Tyr Asp Gln	Gly Val Glu Pro Glu Leu	Glu Pro Ala Asp
405	410	415
Asp Leu Asp Gly Gly Thr	Glu Glu Gln Gly Glu Gln	Asp Phe Arg Lys
420	425	430
Tyr Glu Glu Gly Phe Asp	Pro Tyr Ser Met Phe Thr	Pro Glu Gln Ile
435	440	445
Met Gly Lys Asp Val Arg	Leu Leu Arg Ile Lys Lys	Glu Gly Ser Leu
450	455	460
Asp Leu Ala Leu Glu Gly	Gly Val Asp Ser Pro Ile	Gly Lys Val Val
465	470	475
Val Ser Ala Val Tyr Glu	Arg Gly Ala Ala Glu Arg	His Gly Gly Ile
485	490	495
Val Lys Gly Asp Glu Ile	Met Ala Ile Asn Gly Lys	Ile Val Thr Asp
500	505	510
Tyr Thr Leu Ala Glu Ala	Asp Ala Ala Leu Gln Lys	Ala Trp Asn Gln
515	520	525
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2162

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 <213> Homo Sapiens

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 Leu Ile Pro Leu Lys His Gln Val Glu Tyr Asp Gln Leu Thr Pro Arg
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 Arg Ser Arg Lys Leu Lys Glu Val Arg Leu Asp Arg Leu His Pro Glu
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 Phe Ile Ser His Leu Ile Lys Gly Gly Gln Ala Asp Ser Val Gly Leu
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 Gln Val Gly Asp Glu Ile Val Arg Ile Asn Gly Tyr Ser Ile Ser Ser
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 Cys Thr His Glu Glu Val Ile Asn Leu Ile Arg Thr Lys Lys Thr Val
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 Asp Glu Pro Leu Thr Trp Gln Tyr Val Asp Gln Phe Val Ser Glu Ser
 180 185 190
 Gly Gly Val Arg Gly Ser Leu Gly Ser Pro Gly Asn Arg Glu Asn Lys
 195 200 205
 Glu Lys Lys Val Phe Ile Ser Leu Val Gly Ser Arg Gly Leu Gly Cys
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 Val Lys Pro Gly Ser Leu Ser Ala Glu Val Gly Leu Glu Ile Gly Asp
 245 250 255
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 260 265 270
 Glu Ala Val Asn Val Leu Lys Asn Ser Arg Ser Leu Thr Ile Ser Ile
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 Val Ala Ala Ala Gly Arg Glu Leu Phe Met Thr Asp Arg Glu Arg Leu
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 325 330 335
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 <212> DNA
 <213> Homo Sapiens

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 <211> 493
 <212> PRT
 <213> Homo Sapiens

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 Lys Cys Ala Gln His Glu Ala Val Leu Ser Gln Thr His Thr Asn Val
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 115 120 125
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<400> 556

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<210> 557
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 <212> PRT
 <213> Homo Sapiens

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Arg Lys Glu Met Glu Gln Ile Val Glu Glu Glu Glu Lys Phe Lys Lys
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Gln Trp Glu Glu Asp Trp Gly Ser Lys Glu Gln Leu Leu Leu Pro Lys
50        55        60
Thr Ile Thr Ala Glu Val His Pro Val Pro Leu Arg Lys Pro Lys Tyr
65        70        75        80
Asp Gln Gly Val Glu Pro Glu Leu Glu Pro Ala Asp Asp Leu Asp Gly
85        90        95
Gly Thr Glu Glu Gln Gly Glu Gln Asp Phe Arg Lys Tyr Glu Glu Gly
100       105       110
Phe Asp Pro Tyr Ser Met Phe Thr Pro Glu Gln Ile Met Gly Lys Asp
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<400> 558

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<211> 481

<212> PRT

<2.13> Homo Sapiens

<400> 559

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 Asp Leu Asp Gly Gly Thr Glu Glu Gln Gly Glu Gln Pro Gln Glu Met
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 <212> DNA
 <213> Homo Sapiens

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gaacctgagc tcgagcccgc agatgacctg gatggaggca cggaggagca gggagagcag 1380
acattttgcc caagcccaca gctccacga ggccctggcg tgtccaccat ctccaaacct 1440
gtcatggtcc accaggagcc caatttcac tacaggccag ctgtgaaatc tgaagttctg 1500
ccacaggaga tgttgaagag gatggtggtt tatcaagaca gcattcaaga caagatttcc 1560
ggaaatatga ggaaggcttt gaccctact ctatgttcac cccagagcag atcatgggga 1620
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cagactacac cctggctgag gctgacgctg ccctgcagaa ggctggaat cagggcgggg 1860
actggatcga ccttgtggtt gccgtctgcc ccccaaagga gtatgacgat gagctgacct 1920
tcttgctgaa gtccaaaagg ggaaacaaa ttcacgcgtt aggaaacagt gagctccggc 1980
cccacctcgt gaacacaaag cctcggacca gccttgagag aggccacatg acacacacca 2040
gatggcatcc ttgggacctg aatctatcac ccaggaatct caaactccct ttggccctga 2100
accagggccca gataaggaac agctcgggcc acttttttga aggccaatgt ggaggaaagg 2160
gagcagccag ccgtttggga gaagatctca aggatccaga ctctcattcc tttcctctgg 2220
cccagtgaat ttggtctctc ccagctttgg gggactcctt ccttgaacct taataagacc 2280
ccatggagat ctctctctct ccctccctct cctctgcctt ctgctctaatt tgctgccagg 2340
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<210> 561

<211> 521

<212> PRT

<213> Homo Sapiens

<400> 561

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Met Asp Arg Lys Val Ala Arg Glu Phe Arg His Lys Val Asp Phe Leu
 1          5          10          15
Ile Glu Asn Asp Ala Glu Lys Asp Tyr Leu Tyr Asp Val Leu Arg Met
 20          25          30
Tyr His Gln Thr Met Asp Val Ala Val Leu Val Gly Asp Leu Lys Leu
 35          40          45
Val Ile Asn Glu Pro Ser Arg Leu Pro Leu Phe Asp Ala Ile Arg Pro
 50          55          60
Leu Ile Pro Leu Lys His Gln Val Glu Tyr Asp Gln Leu Thr Pro Arg
 65          70          75          80
Arg Ser Arg Lys Leu Lys Glu Val Arg Leu Asp Arg Leu His Pro Glu
 85          90          95
Gly Leu Gly Leu Ser Val Arg Gly Gly Leu Glu Phe Gly Cys Gly Leu
100          105          110
Phe Ile Ser His Leu Ile Lys Gly Gly Gln Ala Asp Ser Val Gly Leu
115          120          125
Gln Val Gly Asp Glu Ile Val Arg Ile Asn Gly Tyr Ser Ile Ser Ser
130          135          140
Cys Thr His Glu Glu Val Ile Asn Leu Ile Arg Thr Lys Lys Thr Val
145          150          155          160
Ser Ile Lys Val Arg His Ile Gly Leu Ile Pro Val Lys Ser Ser Pro
165          170          175
Asp Glu Pro Leu Thr Trp Gln Tyr Val Asp Gln Phe Val Ser Glu Ser
180          185          190
Gly Gly Val Arg Gly Ser Leu Gly Ser Pro Gly Asn Arg Glu Asn Lys
195          200          205

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Glu Lys Lys Val Phe Ile Ser Leu Val Gly Ser Arg Gly Leu Gly Cys
 210 215 220
 Ser Ile Ser Ser Gly Pro Ile Gln Lys Pro Gly Ile Phe Ile Ser His
 225 230 235 240
 Val Lys Pro Gly Ser Leu Ser Ala Glu Val Gly Leu Glu Ile Gly Asp
 245 250 255
 Gln Ile Val Glu Val Asn Gly Val Asp Phe Ser Asn Leu Asp His Lys
 260 265 270
 Glu Ala Val Asn Val Leu Lys Asn Ser Arg Ser Leu Thr Ile Ser Ile
 275 280 285
 Val Ala Ala Ala Gly Arg Glu Leu Phe Met Thr Asp Arg Glu Arg Leu
 290 295 300
 Ala Glu Ala Arg Gln Arg Glu Leu Gln Arg Gln Glu Leu Leu Met Gln
 305 310 315 320
 Lys Arg Leu Ala Met Glu Ser Asn Lys Ile Leu Gln Glu Gln Gln Glu
 325 330 335
 Met Glu Arg Gln Arg Arg Lys Glu Ile Ala Gln Lys Ala Ala Glu Glu
 340 345 350
 Asn Glu Arg Tyr Arg Lys Glu Met Glu Gln Ile Val Glu Glu Glu Glu
 355 360 365
 Lys Phe Lys Lys Gln Trp Glu Glu Asp Trp Gly Ser Lys Glu Gln Leu
 370 375 380
 Leu Leu Pro Lys Thr Ile Thr Ala Glu Val His Pro Val Pro Leu Arg
 385 390 395 400
 Lys Pro Lys Tyr Asp Gln Gly Val Glu Pro Glu Leu Glu Pro Ala Asp
 405 410 415
 Asp Leu Asp Gly Gly Thr Glu Glu Gln Gly Glu Gln Thr Phe Cys Pro
 420 425 430
 Ser Pro Gln Pro Pro Arg Gly Pro Gly Val Ser Thr Ile Ser Lys Pro
 435 440 445
 Val Met Val His Gln Glu Pro Asn Phe Ile Tyr Arg Pro Ala Val Lys
 450 455 460
 Ser Glu Val Leu Pro Gln Glu Met Leu Lys Arg Met Val Val Tyr Gln
 465 470 475 480
 Asp Ser Ile Gln Asp Lys Ile Ser Gly Asn Met Arg Lys Ala Leu Thr
 485 490 495
 Pro Thr Leu Cys Ser Pro Gln Ser Arg Ser Trp Gly Arg Met Ser Gly
 500 505 510
 Ser Tyr Ala Ser Arg Arg Arg Asp Pro
 515 520

<210> 562

<211> 1445

<212> DNA

<213> Homo Sapiens

<400> 562

ctccggcagg	gagtcctagc	gcagactttg	cggttcattg	agagtctctg	ggagacaggc	60
acctgacggac	gctgcagata	agttacgacg	cactgaaaga	tgaaaattct	aagctgagaa	120
gaaagctgaa	tgagggttcag	agcttctctg	aagctcaaac	agaaatggtg	aggacgcttg	180
agcgggaagt	agaagcaaaa	atgatcaagg	aggaaagcga	ctaccacgac	ctggagtcgg	240
tggttcagca	ggtggagcag	aacctggagc	tgatgaccaa	acgggctgta	aaggcagaaa	300
accacgtcgt	gaaactaaaa	caggaaatca	gtttgctcca	ggcgcagggtc	tccaacttcc	360
agcgagagaa	tgaagccctg	cggtgcggcc	aggggtgccag	cctgaccgtg	gtgaagcaga	420
acgccgacgt	ggccctgcag	aacctccggg	tggtcatgaa	cagtgcacag	gcttccatca	480

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agcaactggt ttccggagct gagacactga atcttggtgc cgaaatcctt aaatctatag      540
acagaatttc tgaagttaaa gacgaggagg aagactcttg aggacccttg ggtgttctca      600
gcatgaagct ccgtgtatac cctgagggtca ccaccgctcg atctaaatgt gcagttgtgt      660
ccttaaatat gcagtcttca cccagagtaa agtggtgatc gcaagagtcc agtgctgtgc      720
cctcagccag ttcttggtcc ccacaatggg agcagccctg gccgagttgt ctctgtggtt      780
tctatgcagc cttctctggc gaaattcctg cgatcttata gattctaata agctcttgga      840
agacattgtc ataaaagcca gtgattttta gaaaaagagt gggtctggaa tcaatgtttt      900
ccagtcctcat cccagaacat cagttgtaag ataagtacaa ttggttggtcc ttgatttcat      960
aagtagaaca aacactaaat gtgcctctga gatggccacc ccgggcaggg acctgtgcct     1020
tccgccgatg ctccagggtc cctctgggtc ccgggtcact ctgtgtggcc cagtgggtgg     1080
tccctgcagt catggcctga gtgcgcaggg gccaccgcgt ggctgctgct gtcctcctcc     1140
ggggaccacg ggggaacaag gtcacacctt ccgtgctgtg aagctgtcca gatgtgcctc     1200
tttggtctgg ggttttgggt gacgtttcaa gtggcatttt gtacaatgca ggttagaatt     1260
caggaatttc aagtatgtgc ccgggtntgt caggtcccgag ttgcctttnt gacggccccc     1320
ctcagagggg cggcgatgag cactaaatgc ttttttgant attttcctat agattttttt     1380
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tcacc                                             1445

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<210> 563

<211> 192

<212> PRT

<213> Homo Sapiens

<400> 563

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Pro Ala Gly Ser Pro Ser Ala Asp Phe Ala Val His Gly Glu Ser Leu
 1          5          10          15
Gly Asp Arg His Leu Arg Thr Leu Gln Ile Ser Tyr Asp Ala Leu Lys
          20          25          30
Asp Glu Asn Ser Lys Leu Arg Arg Lys Leu Asn Glu Val Gln Ser Phe
          35          40          45
Ser Glu Ala Gln Thr Glu Met Val Arg Thr Leu Glu Arg Lys Leu Glu
          50          55          60
Ala Lys Met Ile Lys Glu Glu Ser Asp Tyr His Asp Leu Glu Ser Val
65          70          75          80
Val Gln Gln Val Glu Gln Asn Leu Glu Leu Met Thr Lys Arg Ala Val
          85          90          95
Lys Ala Glu Asn His Val Val Lys Leu Lys Gln Glu Ile Ser Leu Leu
          100          105          110
Gln Ala Gln Val Ser Asn Phe Gln Arg Glu Asn Glu Ala Leu Arg Cys
          115          120          125
Gly Gln Gly Ala Ser Leu Thr Val Val Lys Gln Asn Ala Asp Val Ala
          130          135          140
Leu Gln Asn Leu Arg Val Val Met Asn Ser Ala Gln Ala Ser Ile Lys
145          150          155          160
Gln Leu Val Ser Gly Ala Glu Thr Leu Asn Leu Val Ala Glu Ile Leu
          165          170          175
Lys Ser Ile Asp Arg Ile Ser Glu Val Lys Asp Glu Glu Glu Asp Ser
          180          185          190

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<210> 564

<211> 1226

<212> DNA

<213> Homo Sapiens

<400> 564

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ctggggccgcg aggcgcggag cttgggagcg gagcccaggc cgtgccgcgc ggcgccatga      60
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agagccccgag cgcgcaggag ctcaaggagc agggcaatcg tctgttcgtg ggccgaaagt      180
accgcggaggc ggcggcctgc tacggccgcg cgatcacccg gaaccgcgtg gtggcgtgt      240
attacaccaa cggggccttg tgctacctga agatgcagca gcacgagcag gccctggccg      300
actgccggcg cgccttgag ctggacgggc agtctgtgaa ggcgcacttc ttcctggggc      360
agtgccagct ggagatggag agctatgat aggccatcgc caatctgcag cgagcttaca      420
gcctggccaa ggagcagcgg ctgaacttcg gggacgacat cccagcgcct cttcgaatcg      480
cgaagaagaa gcgctggaac agcattgagg agcggcgcat ccaccaggag agcgagctgc      540
actcctacct ctccaggctc attgccgcgg agcgtgagag ggagctggaa gattgccagc      600
gaaaccacga ggggtgatgag gacgacagcc acgtccgggc ccagcaggcc tgcattgagg      660
ccaagcacga caagtacatg gcggacatgg acgagctttt ttctcagggtg gatgagaaga      720
ggaagaagcg agacatcccc gactacctgt gtggcaagat cagctttgag ctgatgcggg      780
agcctgcat cagccccagt ggcatacct acgaccgcaa ggacatcgag gagcacctgc      840
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ccaacttggc tatgaaggag gttattgacg cattcatctc tgagaatggc tgggtggagg      960
actactgagg ttccctgccc tacctggcgt cctggtccag gggagccctg ggcagaagcc     1020
cccgccccct aaacatagtt tatgtttttg gccaccocga ccgcttcccc caagttctgc     1080
tggtggactc tggactgttt cccctctcag categtttt gctgggcccgt gattgtcccc     1140
tttggtgggt ggaaaagcag gtgagggtgg gctgggctga ggccattgcc gccactatct     1200
gtgtaataaa atccgtgagc acgaaa

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<210> 565

<211> 303

<212> PRT

<213> Homo Sapiens

<400> 565

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Met Lys Gly Lys Glu Glu Lys Glu Gly Gly Ala Arg Leu Gly Ala Gly
  1              5              10              15
Gly Gly Ser Pro Glu Lys Ser Pro Ser Ala Gln Glu Leu Lys Glu Gln
  20              25              30
Gly Asn Arg Leu Phe Val Gly Arg Lys Tyr Pro Glu Ala Ala Ala Cys
  35              40              45
Tyr Gly Arg Ala Ile Thr Arg Asn Pro Leu Val Ala Val Tyr Tyr Thr
  50              55              60
Asn Arg Ala Leu Cys Tyr Leu Lys Met Gln Gln His Glu Gln Ala Leu
  65              70              75              80
Ala Asp Cys Arg Arg Ala Leu Glu Leu Asp Gly Gln Ser Val Lys Ala
  85              90              95
His Phe Phe Leu Gly Gln Cys Gln Leu Glu Met Glu Ser Tyr Asp Glu
  100             105             110
Ala Ile Ala Asn Leu Gln Arg Ala Tyr Ser Leu Ala Lys Glu Gln Arg
  115             120             125
Leu Asn Phe Gly Asp Asp Ile Pro Ser Ala Leu Arg Ile Ala Lys Lys
  130             135             140
Lys Arg Trp Asn Ser Ile Glu Glu Arg Arg Ile His Gln Glu Ser Glu
  145             150             155             160
Leu His Ser Tyr Leu Ser Arg Leu Ile Ala Ala Glu Arg Glu Arg Glu
  165             170             175
Leu Glu Glu Cys Gln Arg Asn His Glu Gly Asp Glu Asp Asp Ser His
  180             185             190
Val Arg Ala Gln Gln Ala Cys Ile Glu Ala Lys His Asp Lys Tyr Met
  195             200             205
Ala Asp Met Asp Glu Leu Phe Ser Gln Val Asp Glu Lys Arg Lys Lys

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210	215	220
Arg Asp Ile Pro Asp Tyr Leu Cys Gly Lys Ile Ser Phe Glu Leu Met		
225	230	235
Arg Glu Pro Cys Ile Thr Pro Ser Gly Ile Thr Tyr Asp Arg Lys Asp		240
	245	250
Ile Glu Glu His Leu Gln Arg Val Gly His Phe Asp Pro Val Thr Gly		255
	260	265
Ser Pro Leu Thr Gln Glu Gln Phe Ile Pro Asn Leu Ala Met Lys Glu		270
	275	280
Val Ile Asp Ala Phe Ile Ser Glu Asn Gly Trp Val Glu Asp Tyr		285
290	295	300

<210> 566

<211> 1857

<212> DNA

<213> Homo Sapiens

<400> 566

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tagtggccgg	ccggccgctc	tcatcccccg	taaggagcag	agtcctttgt	actgaccaag	180
atgagcaaca	tctacatcca	ggagcctccc	acgaatggga	aggttttatt	gaaaactaca	240
gctggagata	ttgacataga	gttgtggtcc	aaagaagctc	ctaaagcttg	cagaaatttt	300
atcccaactt	tgtttggaag	cttattatga	caataccatt	tttcatagag	ttgtgcctgg	360
tttcatagtc	caaggcggag	atcctactgg	cacagggagt	ggtggagagt	ctatctatgg	420
agcgccattc	aaagatgaat	ttcattcacg	gttgcgtttt	aatcggagag	gactggttgc	480
catggcaaatt	gctggttctc	atgataatgg	caccactttt	ttcttcacac	tgggtcgagc	540
agatgaactt	aacaataagc	ataccatctt	tggaaagggt	acaggggata	cagtataata	600
catgttgcgga	ctgtcagaag	tagacattga	tgatgacgaa	agaccacata	atccacacaa	660
aataaaaaagc	tgtgaggttt	tgtttaaatcc	ttttgatgac	atcattccaa	gggaaattaa	720
aaggctgaaa	aaagagaaaac	cagaggagga	agtaaagaaa	ttgaaaccca	aaggcacaaa	780
aaatttttagt	ttactttcat	ttggagagga	agctgaggaa	gaagaagagg	aagtaaattcg	840
agtttagtcag	agcatgaagg	gcaaaaagcaa	aagtagtcatt	gacttgctta	aggatgatcc	900
acatctcagt	tctgttccag	ttgtagaaag	tgaaaaagggt	gatgcaccag	atttagttga	960
tgatggagaa	gatgaaagtg	cagagcatga	tgaatatatt	gatggtgatg	aaaagaacct	1020
gatgagagaa	agaattgcca	aaaaattaaa	aaaggacaca	agtgcgaatg	ttaaatcagc	1080
tggagaagga	gaagtggaga	agaaatcagt	cagccgcagt	gaagagctca	gaaaagaagc	1140
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acaagcagaa	aaaagaagtg	aagaggaaga	agcccctcca	gatggtgctg	ttgccgaata	1260
cagaagagaa	aagcaaaagt	atgaagcttt	gaggaagcaa	cagtcaaaga	agggaaacttc	1320
ccgggaagat	cagacccttg	cactgctgaa	ccagtttaaa	tctaaactca	ctcaagcaat	1380
tgctgaaaca	cctgaaaatg	acattcctga	aacagaagta	gaagatgatg	aaggatggat	1440
gtcacatgta	cttcagtttg	aggataaaaag	cagaaaagtg	aaagatgcaa	gcatgcaaga	1500
ctcagataca	tttgaaatct	atgatcctcg	gaatccagtg	aataaaaagaa	ggagggaaga	1560
aagcaaaaag	ctgatgagag	agaaaaaaga	agaagataaa	aatgagaata	atgataacca	1620
gaacttgctg	gaaatgtgcc	tacaatggcc	ttgtaacagc	cattgttccc	aacagcatca	1680
cttaggggtg	tgaagaagaag	tatttttgaa	cctgttgtct	ggttttgaaa	aacaattatc	1740
ttgttttgca	aattgtggaa	tgatgtaagc	aaatgctttt	ggttactggg	acatgtgttt	1800
tttcctagct	gaccttttat	attgctaaat	ctgaaataaa	ataactttcc	ttccaaa	1857

<210> 567

<211> 372

<212> PRT

<213> Homo Sapiens

<400> 567

Met	Ala	Asn	Ala	Gly	Ser	His	Asp	Asn	Gly	Thr	His	Phe	Phe	Phe	Thr
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Leu	Gly	Arg	Ala	Asp	Glu	Leu	Asn	Asn	Lys	His	Thr	Ile	Phe	Gly	Lys
			20					25					30		
Val	Thr	Gly	Asp	Thr	Val	Tyr	Asn	Met	Leu	Arg	Leu	Ser	Glu	Val	Asp
		35					40					45			
Ile	Asp	Asp	Asp	Glu	Arg	Pro	His	Asn	Pro	His	Lys	Ile	Lys	Ser	Cys
	50					55					60				
Glu	Val	Leu	Phe	Asn	Pro	Phe	Asp	Asp	Ile	Ile	Pro	Arg	Glu	Ile	Lys
65					70					75					80
Arg	Leu	Lys	Lys	Glu	Lys	Pro	Glu	Glu	Glu	Val	Lys	Lys	Leu	Lys	Pro
			85						90					95	
Lys	Gly	Thr	Lys	Asn	Phe	Ser	Leu	Leu	Ser	Phe	Gly	Glu	Glu	Ala	Glu
			100					105						110	
Glu	Glu	Glu	Glu	Glu	Val	Asn	Arg	Val	Ser	Gln	Ser	Met	Lys	Gly	Lys
		115					120					125			
Ser	Lys	Ser	Ser	His	Asp	Leu	Leu	Lys	Asp	Asp	Pro	His	Leu	Ser	Ser
	130					135					140				
Val	Pro	Val	Val	Glu	Ser	Glu	Lys	Gly	Asp	Ala	Pro	Asp	Leu	Val	Asp
145					150					155					160
Asp	Gly	Glu	Asp	Glu	Ser	Ala	Glu	His	Asp	Glu	Tyr	Ile	Asp	Gly	Asp
			165						170					175	
Glu	Lys	Asn	Leu	Met	Arg	Glu	Arg	Ile	Ala	Lys	Lys	Leu	Lys	Lys	Asp
		180						185					190		
Thr	Ser	Ala	Asn	Val	Lys	Ser	Ala	Gly	Glu	Gly	Glu	Val	Glu	Lys	Lys
		195					200					205			
Ser	Val	Ser	Arg	Ser	Glu	Glu	Leu	Arg	Lys	Glu	Ala	Arg	Gln	Leu	Lys
	210					215					220				
Arg	Glu	Leu	Leu	Ala	Ala	Lys	Gln	Lys	Lys	Val	Glu	Asn	Ala	Ala	Lys
225					230					235					240
Gln	Ala	Glu	Lys	Arg	Ser	Glu	Glu	Glu	Glu	Ala	Pro	Pro	Asp	Gly	Ala
			245						250					255	
Val	Ala	Glu	Tyr	Arg	Arg	Glu	Lys	Gln	Lys	Tyr	Glu	Ala	Leu	Arg	Lys
		260					265						270		
Gln	Gln	Ser	Lys	Lys	Gly	Thr	Ser	Arg	Glu	Asp	Gln	Thr	Leu	Ala	Leu
		275					280					285			
Leu	Asn	Gln	Phe	Lys	Ser	Lys	Leu	Thr	Gln	Ala	Ile	Ala	Glu	Thr	Pro
	290					295					300				
Glu	Asn	Asp	Ile	Pro	Glu	Thr	Glu	Val	Glu	Asp	Asp	Glu	Gly	Trp	Met
305					310					315					320
Ser	His	Val	Leu	Gln	Phe	Glu	Asp	Lys	Ser	Arg	Lys	Val	Lys	Asp	Ala
			325						330					335	
Ser	Met	Gln	Asp	Ser	Asp	Thr	Phe	Glu	Ile	Tyr	Asp	Pro	Arg	Asn	Pro
		340						345					350		
Val	Asn	Lys	Arg	Arg	Arg	Glu	Glu	Ser	Lys	Lys	Leu	Met	Arg	Glu	Lys
		355					360					365			
Lys	Glu	Arg	Arg												
	370														

<210> 568

<211> 1537

<212> DNA

<213> Homo Sapiens

<400> 568

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gccgcgcgcc gatcggtcgt taccgcgagg cgctgggtggc cttcaggctg gacggcgcgg      60
gtcagccctg gttcgccggc ttctgggtct ttgaacagcc gcgatgtcga tcttcacccc      120
caccaaccag atccgcctaa ccaatgtggc cgtgggtacgg atgaagcgtg ccgggaagcg      180
cttcgaaatc gcctgctaca aaaacaaggt cgtcggctgg cggagcggcg tggaaaaaga      240
cctcgatgaa gttctgcaga cccactcagt gtttgtaaag gtttctaaag gtcaggttgc      300
caaaaaggaa gatctcatca gtgcgtttgg aacagatgac caaactgaaa tctgtaagca      360
gattttgact aaaggagaag ttcaagtatc agataaagaa agacacacac aactggagca      420
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caacaagagt acaaaacagc aggcctttgga agtgataaag cagttaaaag agaaaatgaa      600
gatagaacgt gctcacatga agcttcgggt catccttcca gtcaatgaag gcaagaactg      660
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atgcttcatt tctacttaat ggaacttggt ttctgagggt cattatggta tcgtaatgta     1320
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acctttcatt gaacatgctg ccataaatta ggttattttt ggtaaaaaaa taaaagtcaa     1440
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<210> 569

<211> 210

<212> PRT

<213> Homo Sapiens

<400> 569

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Ala Ala Arg Arg Ser Val Val Thr Ala Arg Arg Trp Trp Pro Ser Gly
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Trp Thr Ala Arg Val Ser Pro Gly Ser Pro Ala Ser Gly Ser Leu Asn
      20              25              30
Ser Arg Asp Val Asp Leu His Pro His Gln Pro Asp Pro Pro Asn Gln
      35              40              45
Cys Gly Arg Gly Thr Asp Glu Ala Cys Arg Glu Ala Leu Arg Asn Arg
      50              55              60
Leu Leu Gln Lys Gln Val Val Gly Trp Arg Ser Gly Val Glu Lys Asp
      65              70              75              80
Leu Asp Glu Val Leu Gln Thr His Ser Val Phe Val Asn Val Ser Lys
      85              90              95
Gly Gln Val Ala Lys Lys Glu Asp Leu Ile Ser Ala Phe Gly Thr Asp
      100             105             110
Asp Gln Thr Glu Ile Cys Lys Gln Ile Leu Thr Lys Gly Glu Val Gln
      115             120             125
Val Ser Asp Lys Glu Arg His Thr Gln Leu Glu Gln Met Phe Arg Asp
      130             135             140
Ile Ala Thr Ile Val Ala Asp Lys Cys Val Asn Pro Glu Thr Lys Arg
      145             150             155             160
Pro Tyr Thr Val Ile Leu Ile Glu Arg Ala Met Lys Asp Ile His Tyr

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165 170 175
 Ser Val Lys Thr Asn Lys Ser Thr Lys Gln Gln Ala Leu Glu Val Ile
 180 185 190
 Lys Gln Leu Lys Glu Lys Met Lys Ile Glu Arg Ala His Met Lys Leu
 195 200 205
 Arg Phe
 210

<210> 570
 <211> 1211
 <212> DNA
 <213> Homo Sapiens

<400> 570
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 agacattgat gatgacgaaa gaccacataa tccacacaaa ataaaaagct gtgaggtttt 120
 gtttaaatcct tttgatgaca tcattccaag ggaaattaaa aggctgaaaa aagagaaacc 180
 agaggaggaa gtaaagaaat tgaaacccaa aggcacaaaa aatttttagtt tacttttcatt 240
 tggagaggaa gctgaggaag aagaggagga agtaaatcga gttagtcaga gcatgaaggg 300
 caaaagcaaa agtagcatg acttgcttaa ggatgatcca catctcagtt ctgttccagt 360
 tgtagaaaagt gaaaaagggtg atgcagcaga tttagtgtgat gatggagaag atgaaagtgc 420
 agagcatgat gaatatattg atggtgatga aaagaacctg atgagagaaa gaattgccaa 480
 aaaattaaaa aaggacacaa gtgcgaatgt taaatcagct ggagaaggag aagtggagaa 540
 gaaatcagtc agccgcagtg aagagctcag aaaagaagca agacaattaa aacgggaact 600
 cttagcagca gaacaaaaaa aagtagaaaa tgcagcaaaa caagcagaaa aaagaagtga 660
 agaggaagaa gccctccag atggtgctgt tgccgaatac agaagagaaa agcaaaaagta 720
 tgaagctctg aggaagcaac agtcaaagaa gggaacttcc cggaagatc agacccttgc 780
 actgctgaac cagtttaaat ctaaaactcac tcaagcaatt gctgaaacgc ctgaaaatga 840
 cattcctgaa acagaagtag aagatgatga aggatggatg tcacatgtac ttcagtttga 900
 ggataaaaagc agaaaagtga aagatgcaag catgcaagac tcagatacat ttgaaatcta 960
 tgatcctcgg aatccagtga ataaaagaag gagggaagaa agcaaaaagc tgatgagaga 1020
 gaaaaaagaa agaagataaa atgagaataa tgataaccag aacttgctgg aaatgtgcct 1080
 acaatggcct tgtaacagcc attgttccca acagcatcac ttaggggtgt gaaaagaagt 1140
 atttttgaac ctgttgtctg gttttgaaaa acaattatct tgttttgcaa attgtggaat 1200
 gatgtaagca a 1211

<210> 571
 <211> 354
 <212> PRT
 <213> Homo Sapiens

<400> 571
 Pro Ser Leu Glu Arg Leu Gln Gly Tyr Thr Val Tyr Asn Met Leu Arg
 1 5 10 15
 Leu Ser Glu Val Asp Ile Asp Asp Asp Glu Arg Pro His Asn Pro His
 20 25 30
 Lys Ile Lys Ser Cys Glu Val Leu Phe Asn Pro Phe Asp Asp Ile Ile
 35 40 45
 Pro Arg Glu Ile Lys Arg Leu Lys Lys Glu Lys Pro Glu Glu Glu Val
 50 55 60
 Lys Lys Leu Lys Pro Lys Gly Thr Lys Asn Phe Ser Leu Leu Ser Phe
 65 70 75 80
 Gly Glu Glu Ala Glu Glu Glu Glu Glu Val Asn Arg Val Ser Gln
 85 90 95
 Ser Met Lys Gly Lys Ser Lys Ser Ser His Asp Leu Leu Lys Asp Asp

100 105 110
 Pro His Leu Ser Ser Val Pro Val Val Glu Ser Glu Lys Gly Asp Ala
 115 120 125
 Ala Asp Leu Val Asp Asp Gly Glu Asp Glu Ser Ala Glu His Asp Glu
 130 135 140
 Tyr Ile Asp Gly Asp Glu Lys Asn Leu Met Arg Glu Arg Ile Ala Lys
 145 150 155 160
 Lys Leu Lys Lys Asp Thr Ser Ala Asn Val Lys Ser Ala Gly Glu Gly
 165 170 175
 Glu Val Glu Lys Lys Ser Val Ser Arg Ser Glu Glu Leu Arg Lys Glu
 180 185 190
 Ala Arg Gln Leu Lys Arg Glu Leu Leu Ala Ala Glu Gln Lys Lys Val
 195 200 205
 Glu Asn Ala Ala Lys Gln Ala Glu Lys Arg Ser Glu Glu Glu Glu Ala
 210 215 220
 Pro Pro Asp Gly Ala Val Ala Glu Tyr Arg Arg Glu Lys Gln Lys Tyr
 225 230 235 240
 Glu Ala Leu Arg Lys Gln Gln Ser Lys Lys Gly Thr Ser Arg Glu Asp
 245 250 255
 Gln Thr Leu Ala Leu Leu Asn Gln Phe Lys Ser Lys Leu Thr Gln Ala
 260 265 270
 Ile Ala Glu Thr Pro Glu Asn Asp Ile Pro Glu Thr Glu Val Glu Asp
 275 280 285
 Asp Glu Gly Trp Met Ser His Val Leu Gln Phe Glu Asp Lys Ser Arg
 290 295 300
 Lys Val Lys Asp Ala Ser Met Gln Asp Ser Asp Thr Phe Glu Ile Tyr
 305 310 315 320
 Asp Pro Arg Asn Pro Val Asn Lys Arg Arg Arg Glu Glu Ser Lys Lys
 325 330 335
 Leu Met Arg Glu Lys Lys Glu Arg Arg Ile Leu Pro Val Asn Glu Gly
 340 345 350
 Lys Asn

<210> 572

<211> 604

<212> DNA

<213> Homo Sapiens

<400> 572

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 tcccttttagc aacagggccc ccaagaagct cccgttcatt cacccttacc ttggccccc 120
 gggttgaccc ccaaaggctc ccttacccca aagtgggtgg ttgaataaat cttctcagtt 180
 ccctggctcc caaggcccat tgaagaagat tgtacaaggc gtgcctcaag taccctcagt 240
 ggaaacagaa gcacctgcct cacttcaagc cgtggctgca cccggagcag agcccgttgc 300
 cgagcctggc gctgtcggag ctgtcgggtgc agcatgcgga ctactggag aacatcgacg 360
 agagcgcggt ggccgagagc agagaggagc ggatgggcgg cgcgggcggc gagggcagcg 420
 acgacgacac cttcacctga gcccgaccg cttcaggagc ggagacagga ccgggcgagc 480
 cctggggcgg cggcgctcc tgcactttct cccctcccc acccggcacc tgggtggcacc 540
 gggccaggcc caggcggtg ctgcagcctg gctggacaga gcccaataaa cggtatccac 600
 agcc 604

<210> 573

<211> 195

<212> PRT

<213> Homo Sapiens

<400> 573

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Leu Arg Gln Lys Ile Leu Val Pro Thr Phe Cys Ser Ile Pro Lys Gly
 1           5           10           15
Leu Thr Phe Ile Pro Phe Ser Asn Arg Ala Pro Lys Lys Leu Pro Phe
          20           25           30
Ile His Pro Tyr Leu Gly Pro Gln Val Gly Pro Pro Lys Ala Pro Leu
          35           40           45
Pro Gln Ser Gly Trp Leu Asn Lys Ser Ser Gln Phe Pro Gly Ser Gln
          50           55           60
Gly Pro Leu Lys Lys Ile Val Gln Gly Val Pro Gln Val Pro Arg Val
65           70           75           80
Glu Thr Glu Ala Pro Ala Ser Leu Gln Ala Val Ala Ala Pro Gly Ala
          85           90           95
Glu Pro Val Ala Glu Pro Gly Ala Val Gly Ala Val Gly Ala Ala Cys
          100          105          110
Gly Leu Thr Gly Glu His Arg Arg Glu Arg Gly Gly Arg Glu Gln Arg
          115          120          125
Gly Ala Asp Gly Arg Arg Gly Arg Arg Gly Gln Arg Arg Arg His Leu
          130          135          140
His Leu Ser Pro His Arg Phe Arg Asp Gly Asp Arg Thr Gly Arg Ala
145          150          155          160
Leu Gly Arg Arg Pro Leu Leu His Phe Leu Pro Ser Pro Thr Arg His
          165          170          175
Leu Val Ala Pro Gly Gln Ala Gln Ala Gly Ala Ala Ala Trp Leu Asp
          180          185          190
Arg Ala Gln
          195

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<210> 574

<211> 742

<212> DNA

<213> Homo Sapiens

<400> 574

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cccaccaggg cccctcgat gcagagacag aggtcggtgc tgaccgctgc acgtcgactg      60
cctaccagga gcagaggccc caggtggagc aagttggcaa agtcgctcct ctctccccag      120
ggctgccggc aatggggggg cctggccccg gccctgtga ggaccccgcg ggtgctgggg      180
gagcaggtgc agggggctcc gagcccctgg tgactgtcac cgtgcagtgc gccttcacag      240
tggccctgag ggcaggaaga ggagccgacc tgtccagcct gcgggcactg ctgggccaag      300
ccttccttca ccaggcccag cttgggcaat tcagttacct agccccaggt gaggacgggc      360
actgggtccc catccccgag gaggagtcgc tgcagagggc ctggcaggac gcagctgcct      420
gccccagggg gctgcagctg cagtgcaggg gagecggggg tcggccggtc ctttaccagg      480
tggtggccca gcacagatac tccgcccagg ggccagagga cctgggcttc cgacaggggg      540
acacggtgga cgtcctgtgt gaagtggacc aggcattggt ggagggccac tgtgacggcc      600
gcatcggcac cttccccaag tgcttcgtgg tccccgcgg ccctcgcatg tcaggagccc      660
ccggccgcct gccccgatcc cagcagggag atcagcccta atgatgctgt gtccatgatg      720
cttttaataa aaacaacccc ca                                742

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<210> 575

<211> 232

<212> PRT

<213> Homo Sapiens

<400> 575
 His Gln Gly Pro Leu Asp Ala Glu Thr Glu Val Gly Ala Asp Arg Cys
 1 5 10 15
 Thr Ser Thr Ala Tyr Gln Glu Gln Arg Pro Gln Val Glu Gln Val Gly
 20 25 30
 Lys Val Ala Pro Leu Ser Pro Gly Leu Pro Ala Met Gly Gly Pro Gly
 35 40 45
 Pro Gly Pro Cys Glu Asp Pro Ala Gly Ala Gly Gly Ala Gly Ala Gly
 50 55 60
 Gly Ser Glu Pro Leu Val Thr Val Thr Val Gln Cys Ala Phe Thr Val
 65 70 75 80
 Ala Leu Arg Ala Gly Arg Gly Ala Asp Leu Ser Ser Leu Arg Ala Leu
 85 90 95
 Leu Gly Gln Ala Phe Leu His Gln Ala Gln Leu Gly Gln Phe Ser Tyr
 100 105 110
 Leu Ala Pro Gly Glu Asp Gly His Trp Val Pro Ile Pro Glu Glu Glu
 115 120 125
 Ser Leu Gln Arg Ala Trp Gln Asp Ala Ala Ala Cys Pro Arg Gly Leu
 130 135 140
 Gln Leu Gln Cys Arg Gly Ala Gly Gly Arg Pro Val Leu Tyr Gln Val
 145 150 155 160
 Val Ala Gln His Arg Tyr Ser Ala Gln Gly Pro Glu Asp Leu Gly Phe
 165 170 175
 Arg Gln Gly Asp Thr Val Asp Val Leu Cys Glu Val Asp Gln Ala Trp
 180 185 190
 Leu Glu Gly His Cys Asp Gly Arg Ile Gly Ile Phe Pro Lys Cys Phe
 195 200 205
 Val Val Pro Ala Gly Pro Arg Met Ser Gly Ala Pro Gly Arg Leu Pro
 210 215 220
 Arg Ser Gln Gln Gly Asp Gln Pro
 225 230

<210> 576
 <211> 1087
 <212> DNA
 <213> Homo Sapiens

<400> 576
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 ttcaaacaac cggtaaccaa agtcacaaat catcctagta ataaagtga atcagaccca 180
 caacgaatga atgaacagcc acgtcagctt ttctgggaga agaggctaca aggacttagt 240
 gcatcagatg taacagaaca aattataaaa accatggaac taccctaaagg tcttcaagga 300
 gttggtccag gtagcaatga tgagaccctt ttatctgctg ttgccagtgc tttgcacaca 360
 agctctgcgc caatcacagg gcaagtctcc gctgctgtgg aaaagaaccc tgctgtttgg 420
 cttaacacat ctcaaccct ctgcaaagct tttattgtca cagatgaaga catcaggaaa 480
 caggaagagc gactacagca agtacgcaag aaattggaag aagcactgat ggcagacatc 540
 ttgtcgcgag ctgctgatac agaagagatg gatattgaaa tggacagtgg agatgaagcc 600
 taagaatatg atcaggtaac ttctgaccga ctttcccca gagaaaattc ctagaaattg 660
 aacaaaaatg tttccactgg cttttgcctg taagaaaaaa aatgtacccg agcacataga 720
 gctttttaat agcactaacc aatgcctttt tagatgtatt tttgatgtat atatctatta 780
 ttcaaaaaat catgtttatt ttgagtccta ggacttaaaa ttagtctttt gtaatatcaa 840
 gcaggaccct aagatgaagc tgagcttttg atgccaggtg caatttactg gaaatgtagc 900
 acttacgtaa aacatttggt tccccacag ttttaataag aacagatcag gaattctaaa 960
 taaatttccc agttaaagat tattgtgact tcaactgtata taaacatatt tttatacttt 1020

attgaaaggg gacacctgta cattcttcca tcgtcactgt aaagacaaat aaatgattat 1080
attcaca 1087

<210> 577
<211> 200
<212> PRT
<213> Homo Sapiens

<400> 577
Lys Met Met Pro Ser Lys Leu Gln Lys Asn Lys Gln Arg Leu Arg Asn
1 5 10 15
Asp Pro Leu Asn Gln Asn Lys Gly Lys Pro Asp Leu Asn Thr Thr Leu
20 25 30
Pro Ile Arg Gln Thr Ala Ser Ile Phe Lys Gln Pro Val Thr Lys Val
35 40 45
Thr Asn His Pro Ser Asn Lys Val Lys Ser Asp Pro Gln Arg Met Asn
50 55 60
Glu Gln Pro Arg Gln Leu Phe Trp Glu Lys Arg Leu Gln Gly Leu Ser
65 70 75 80
Ala Ser Asp Val Thr Glu Gln Ile Ile Lys Thr Met Glu Leu Pro Lys
85 90 95
Gly Leu Gln Gly Val Gly Pro Gly Ser Asn Asp Glu Thr Leu Leu Ser
100 105 110
Ala Val Ala Ser Ala Leu His Thr Ser Ser Ala Pro Ile Thr Gly Gln
115 120 125
Val Ser Ala Ala Val Glu Lys Asn Pro Ala Val Trp Leu Asn Thr Ser
130 135 140
Gln Pro Leu Cys Lys Ala Phe Ile Val Thr Asp Glu Asp Ile Arg Lys
145 150 155 160
Gln Glu Glu Arg Val Gln Gln Val Arg Lys Lys Leu Glu Glu Ala Leu
165 170 175
Met Ala Asp Ile Leu Ser Arg Ala Ala Asp Thr Glu Glu Met Asp Ile
180 185 190
Glu Met Asp Ser Gly Asp Glu Ala
195 200

<210> 578
<211> 2569
<212> DNA
<213> Homo Sapiens

<400> 578
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tgtttctcat ataaatgacc ttctcagactt ttatgttcaa ctaatagaag atgaagctga 180
aattagtcac ctttcagaga gattaaacag tgttaaaaca aggcccgaat attatgtagg 240
tccacctttg caaagaggag atatgatatg tgctgttttc ccagaagata atttatggta 300
tcgtgctgtg atcaaggagc aacaacccaa tgaccttctc tctgtgcagt ttatagatta 360
tggcaatgtt tctgtggttc atactaacia aataggtagg cttgaccttg ttaatgcaat 420
attgccgggg ttgtgcattc attgtctcctt gcagggattt gaggttcctg acaataaaaa 480
ttctaagaaa atgatgcatt acttttccca acggaccagc gaggctgcaa taagatgtga 540
atgtgttaaa tttcaagaca gatgggaagt tattcttgct gatgaacatg ggatcatagc 600
agatgatatg attagcaggt atgctctcag tgaaaaatct caagtagaac tttctaccca 660
agtaattaaa agtgccaggt caaagtctgt taacaaatca gacattgaca cttcagtatt 720
tcttaactgg tataatccag aaaaaaaaaat gataagagct tatgccactg tgatagatgg 780

acctgagtag ttttggtgtc agtttgctga tacggagaaa cttcagtgtt tagaagtaga 840
 agtacagact gctggagaac aggtagcaga caggagaaat tgtatcccat gtccttatat 900
 tggagatcct tgtatagtaa gatacagaga agatggacat tattataggg cacttatcac 960
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 ctgtgtggac ccaaaagcac tctgggccat tcttcttgaa cttctgtcgg ttcccatgca 1080
 agcctttcca tgttgccctc cagggtttta catttcagaa ggattatgtt ctcaagaggg 1140
 aaatgactat ttctatgaaa taataacaga agatgtgttg gaaataacaa tactagaaat 1200
 cagaagggat gtttgtgata tcccttttagc aattgttgac ttgaaaagca aaggtaaaag 1260
 tattaatgag aaaatggaga aatattctaa gactgggtatt aaaagtgtc ttccctatga 1320
 aaatattgac tcagagataa agcagactct tgggtcctac aatcttgatg taggacttaa 1380
 gaaattaagt aataaagctg tacaaaataa aatatatatg gaacaacaga cagatgagct 1440
 tgctgaaata actgaaaaag atgtaaaccat tattggaacc aaaccaagta acttccgtga 1500
 ccctaaaact gataacattt gtgaagggtt tgaaaacccc tgcaaagata aaattgatac 1560
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 atacctgatt acaggattta acacattact accacatgct aatgaaacaa aggagatact 1680
 agaactgaat tcacttgagg tgccgcttct tctgatgat gaatcaaaag aattcttaga 1740
 actggaatct attgagttac agaattctct ggtggtggat gaagaaaaag gggagctaag 1800
 cccggtgccca ccgaatgtgc cactctccca agagtgtgtc acaaaaggcg ccatggagct 1860
 atttacactg cagcttctct tcagctgtga agctgagaaa cagccagaac tagaactacc 1920
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 attgatgctt ttttctctga ggaagaaagc agtgatggaa gcaagcacia taatggttta 2220
 ccagatcata tttcagntca attacagaac acctacactn tgaaagcctt tactgttggg 2280
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 acagctgaag aaggnaaag ggttttgaac ctttcaaagt gtatggagga gatagtgaac 2400
 cctgagaatg tctggaatgn nanacccaaa ttggataaga gtccacctga gaaaaggggt 2460
 ttggaggtga tggagattta accgtggatn tatagctgtg gccaatcagt cagaagctgc 2520
 ccntgaacaa gtggcatctt acgcagacca acagagtatt tgagaaaat 2569

<210> 579

<211> 752

<212> PRT

<213> Homo Sapiens

<400> 579

Arg Val Lys Ala Thr Leu Ser Glu Arg Lys Ile Gly Asp Ser Cys Asp
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 20 25 30
 Pro Gly Phe Lys Thr Thr Val Tyr Val Ser His Ile Asn Asp Leu Ser
 35 40 45
 Asp Phe Tyr Val Gln Leu Ile Glu Asp Glu Ala Glu Ile Ser His Leu
 50 55 60
 Ser Glu Arg Leu Asn Ser Val Lys Thr Arg Pro Glu Tyr Tyr Val Gly
 65 70 75 80
 Pro Pro Leu Gln Arg Gly Asp Met Ile Cys Ala Val Phe Pro Glu Asp
 85 90 95
 Asn Leu Trp Tyr Arg Ala Val Ile Lys Glu Gln Gln Pro Asn Asp Leu
 100 105 110
 Leu Ser Val Gln Phe Ile Asp Tyr Gly Asn Val Ser Val Val His Thr
 115 120 125
 Asn Lys Ile Gly Arg Leu Asp Leu Val Asn Ala Ile Leu Pro Gly Leu
 130 135 140

Cys Ile His Cys Ser Leu Gln Gly Phe Glu Val Pro Asp Asn Lys Asn
 145 150 155 160
 Ser Lys Lys Met Met His Tyr Phe Ser Gln Arg Thr Ser Glu Ala Ala
 165 170 175
 Ile Arg Cys Glu Phe Val Lys Phe Gln Asp Arg Trp Glu Val Ile Leu
 180 185 190
 Ala Asp Glu His Gly Ile Ile Ala Asp Asp Met Ile Ser Arg Tyr Ala
 195 200 205
 Leu Ser Glu Lys Ser Gln Val Glu Leu Ser Thr Gln Val Ile Lys Ser
 210 215 220
 Ala Ser Ser Lys Ser Val Asn Lys Ser Asp Ile Asp Thr Ser Val Phe
 225 230 235 240
 Leu Asn Trp Tyr Asn Pro Glu Lys Lys Met Ile Arg Ala Tyr Ala Thr
 245 250 255
 Val Ile Asp Gly Pro Glu Tyr Phe Trp Cys Gln Phe Ala Asp Thr Glu
 260 265 270
 Lys Leu Gln Cys Leu Glu Val Glu Val Gln Thr Ala Gly Glu Gln Val
 275 280 285
 Ala Asp Arg Arg Asn Cys Ile Pro Cys Pro Tyr Ile Gly Asp Pro Cys
 290 295 300
 Ile Val Arg Tyr Arg Glu Asp Gly His Tyr Tyr Arg Ala Leu Ile Thr
 305 310 315 320
 Asn Ile Cys Glu Asp Tyr Leu Val Ser Val Arg Leu Val Asp Phe Gly
 325 330 335
 Asn Ile Glu Asp Cys Val Asp Pro Lys Ala Leu Trp Ala Ile Pro Ser
 340 345 350
 Glu Leu Leu Ser Val Pro Met Gln Ala Phe Pro Cys Cys Leu Ser Gly
 355 360 365
 Phe Asn Ile Ser Glu Gly Leu Cys Ser Gln Glu Gly Asn Asp Tyr Phe
 370 375 380
 Tyr Glu Ile Ile Thr Glu Asp Val Leu Glu Ile Thr Ile Leu Glu Ile
 385 390 395 400
 Arg Arg Asp Val Cys Asp Ile Pro Leu Ala Ile Val Asp Leu Lys Ser
 405 410 415
 Lys Gly Lys Ser Ile Asn Glu Lys Met Glu Lys Tyr Ser Lys Thr Gly
 420 425 430
 Ile Lys Ser Ala Leu Pro Tyr Glu Asn Ile Asp Ser Glu Ile Lys Gln
 435 440 445
 Thr Leu Gly Ser Tyr Asn Leu Asp Val Gly Leu Lys Lys Leu Ser Asn
 450 455 460
 Lys Ala Val Gln Asn Lys Ile Tyr Met Glu Gln Gln Thr Asp Glu Leu
 465 470 475 480
 Ala Glu Ile Thr Glu Lys Asp Val Asn Ile Ile Gly Thr Lys Pro Ser
 485 490 495
 Asn Phe Arg Asp Pro Lys Thr Asp Asn Ile Cys Glu Gly Phe Glu Asn
 500 505 510
 Pro Cys Lys Asp Lys Ile Asp Thr Glu Glu Leu Glu Gly Glu Leu Glu
 515 520 525
 Cys His Leu Val Asp Lys Ala Glu Phe Asp Asp Lys Tyr Leu Ile Thr
 530 535 540
 Gly Phe Asn Thr Leu Leu Pro His Ala Asn Glu Thr Lys Glu Ile Leu
 545 550 555 560
 Glu Leu Asn Ser Leu Glu Val Pro Leu Ser Pro Asp Asp Glu Ser Lys
 565 570 575
 Glu Phe Leu Glu Leu Glu Ser Ile Glu Leu Gln Asn Ser Leu Val Val

580										585					590																			
Asp	Glu	Glu	Lys	Gly	Glu	Leu	Ser	Pro	Val	Pro	Pro	Asn	Val	Pro	Leu																			
595										600					605																			
Ser	Gln	Glu	Cys	Val	Thr	Lys	Gly	Ala	Met	Glu	Leu	Phe	Thr	Leu	Gln																			
610										615					620																			
Leu	Pro	Leu	Ser	Cys	Glu	Ala	Glu	Ly's	Gln	Pro	Glu	Leu	Glu	Leu	Pro																			
625										630					635					640														
Thr	Ala	Gln	Leu	Pro	Leu	Asp	Asp	Lys	Met	Asp	Pro	Leu	Ser	Leu	Gly																			
645										650					655																			
Val	Ser	Gln	Lys	Ala	Gln	Glu	Ser	Met	Cys	Thr	Glu	Asp	Met	Arg	Lys																			
660										665					670																			
Ser	Ser	Cys	Val	Glu	Ser	Phe	Asp	Asp	Gln	Arg	Arg	Met	Ser	Leu	His																			
675										680					685																			
Leu	His	Gly	Ala	Asp	Cys	Asp	Pro	Lys	Thr	Gln	Asn	Glu	Met	Asn	Ile																			
690										695					700																			
Cys	Glu	Glu	Glu	Phe	Val	Glu	Tyr	Lys	Asn	Arg	Asp	Ala	Ile	Ser	Ala																			
705										710					715					720														
Leu	Met	Pro	Phe	Ser	Leu	Arg	Lys	Lys	Ala	Val	Met	Glu	Ala	Ser	Thr																			
725										730					735																			
Ile	Met	Val	Tyr	Gln	Ile	Ile	Phe	Gln	Asn	Tyr	Arg	Thr	Pro	Thr	Leu																			
740										745					750																			

<210> 580

<211> 2077

<212> DNA

<213> Homo Sapiens

<400> 580

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gaggtgactc	gagcagtgat	gaggataaa	aataacatga	aactcctgtg	gaagtagaac	180
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aggagctcat	tcaggaagaa	agctctgaag	acgaaggaga	atatgaagag	gtagaaaaag	300
atcaggattc	tgttggtgaa	atgaaggatg	aaggggaaga	gacttaaatt	atcctgatac	360
taccattgac	ttgtctcacc	ttcaacccca	aaggtccatc	cagaaattgg	cttcaaaaga	420
ggaatcttct	aattctagt	acagtaaact	acagagccgg	agacatttgt	cagccaagga	480
aagaagggaa	atgaaaaaga	aaaaacttcc	aagtgactca	ggagatttag	aagcgttaga	540
gggaaaggat	aaagaaaaag	aaagtactgt	acacattgaa	actcatcaga	acacaagcaa	600
aaatgttgcg	gctgtgcagc	caatgaaacg	aggacaaaag	agtaaaatga	aaaaaatgaa	660
agaaaaatac	aaagaccagg	atgaagaaga	ccgtgaactt	atcatgaagt	tgctggggtc	720
tgcaggttca	aacaaagaag	aaaaagggaa	gaaggggaag	aaaggaaaaa	caaaggacga	780
acctgtgaag	aaacagcccc	agaaacctag	aggtggacag	aggggtctctg	acaacattaa	840
gaaagaaact	ccgttccttg	aggttataac	tcatgagtta	caagactttg	ctgtagatga	900
tccacatgat	gacaaggaag	agcaagatct	ggatcaacag	ggaaatgagg	aaaacctatt	960
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<210> 581

<211> 312

<212> PRT

<213> Homo Sapiens

<400> 581

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20     25     30
Ser Asn Ser Ser Asp Ser Lys Ser Gln Ser Arg Arg His Leu Ser Ala
35     40     45
Lys Glu Arg Arg Glu Met Lys Lys Lys Lys Leu Pro Ser Asp Ser Gly
50     55     60
Asp Leu Glu Ala Leu Glu Gly Lys Asp Lys Glu Lys Glu Ser Thr Val
65     70     75     80
His Ile Glu Thr His Gln Asn Thr Ser Lys Asn Val Ala Ala Val Gln
85     90     95
Pro Met Lys Arg Gly Gln Lys Ser Lys Met Lys Lys Met Lys Glu Lys
100    105    110
Tyr Lys Asp Gln Asp Glu Glu Asp Arg Glu Leu Ile Met Lys Leu Leu
115    120    125
Gly Ser Ala Gly Ser Asn Lys Glu Glu Lys Gly Lys Lys Gly Lys Lys
130    135    140
Gly Lys Thr Lys Asp Glu Pro Val Lys Lys Gln Pro Gln Lys Pro Arg
145    150    155    160
Gly Gly Gln Arg Val Ser Asp Asn Ile Lys Lys Glu Thr Pro Phe Leu
165    170    175
Glu Val Ile Thr His Glu Leu Gln Asp Phe Ala Val Asp Asp Pro His
180    185    190
Asp Asp Lys Glu Glu Gln Asp Leu Asp Gln Gln Gly Asn Glu Glu Asn
195    200    205
Leu Phe Asp Ser Leu Thr Gly Gln Pro His Pro Glu Asp Val Leu Leu
210    215    220
Phe Ala Ile Pro Ile Cys Ala Pro Tyr Thr Thr Met Thr Asn Tyr Lys
225    230    235    240
Tyr Lys Val Lys Leu Thr Pro Gly Val Gln Lys Lys Gly Lys Ala Ala
245    250    255
Lys Thr Ala Leu Asn Ser Phe Met His Ser Lys Glu Ala Thr Ala Arg
260    265    270
Glu Lys Asp Leu Phe Arg Ser Val Lys Asp Thr Asp Leu Ser Arg Asn
275    280    285
Ile Pro Gly Lys Val Lys Ser Val Cys Thr Gln Ser Ser Glu Arg Lys
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Lys Glu Ile Ala Glu Met Lys Phe
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<210> 582
 <211> 3309
 <212> DNA
 <213> Homo Sapiens

<400> 582

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<210> 583

<211> 872

<212> PRT

<213> Homo Sapiens

<400> 583

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 20          25          30
Arg Ala Gly Gly Ile Glu Thr Ile Ala Asn Glu Phe Ser Asp Arg Cys
 35          40          45
Thr Pro Ser Val Ile Ser Phe Gly Ser Lys Asn Arg Thr Ile Gly Val
 50          55          60
Ala Ala Lys Asn Gln Gln Ile Thr His Ala Asn Asn Thr Val Ser Asn
 65          70          75          80
Phe Lys Arg Phe His Gly Arg Ala Phe Asn Asp Pro Phe Ile Gln Lys
 85          90          95
Glu Lys Glu Asn Leu Ser Tyr Asp Leu Val Pro Leu Lys Asn Gly Gly
100          105          110
Val Gly Ile Lys Val Met Tyr Met Gly Glu Glu His Leu Phe Ser Val
115          120          125
Glu Gln Ile Thr Ala Met Leu Leu Thr Lys Leu Lys Glu Thr Ala Glu
130          135          140
Asn Ser Leu Lys Lys Pro Val Thr Asp Cys Val Ile Ser Val Pro Ser
145          150          155          160
Phe Phe Thr Asp Ala Glu Arg Arg Ser Val Leu Asp Ala Ala Gln Ile
165          170          175
Val Gly Leu Asn Cys Leu Arg Leu Met Asn Asp Met Thr Ala Val Ala
180          185          190
Leu Asn Tyr Gly Ile Tyr Lys Gln Asp Leu Pro Ser Leu Asp Glu Lys
195          200          205
Pro Arg Ile Val Val Phe Val Asp Met Gly His Ser Ala Phe Gln Val
210          215          220
Ser Ala Cys Ala Phe Asn Lys Gly Lys Leu Lys Val Leu Gly Thr Ala
225          230          235          240
Phe Asp Pro Phe Leu Gly Gly Lys Asn Phe Asp Glu Lys Leu Val Glu
245          250          255
His Phe Cys Ala Glu Phe Lys Thr Lys Tyr Lys Leu Asp Ala Lys Ser
260          265          270
Lys Ile Arg Ala Leu Leu Arg Leu Tyr Gln Glu Cys Glu Lys Leu Lys
275          280          285
Lys Leu Met Ser Ser Asn Ser Thr Asp Leu Pro Leu Asn Ile Glu Cys
290          295          300
Phe Met Asn Asp Lys Asp Val Ser Gly Lys Met Asn Arg Ser Gln Phe
305          310          315          320
Glu Glu Leu Cys Ala Glu Leu Leu Gln Lys Ile Glu Val Pro Leu Tyr

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325 330 335
 Ser Leu Leu Glu Gln Thr His Leu Lys Val Glu Asp Val Ser Ala Val
 340 345 350
 Glu Ile Val Gly Gly Ala Thr Arg Ile Pro Ala Val Lys Glu Arg Ile
 355 360 365
 Ala Lys Phe Phe Gly Lys Asp Ile Ser Thr Thr Leu Asn Ala Asp Glu
 370 375 380
 Ala Val Ala Arg Gly Cys Ala Leu Gln Cys Ala Ile Leu Ser Pro Ala
 385 390 395 400
 Phe Lys Val Arg Glu Phe Ser Val Thr Asp Ala Val Pro Phe Pro Ile
 405 410 415
 Ser Leu Ile Trp Asn His Asp Ser Glu Asp Thr Glu Gly Val His Glu
 420 425 430
 Val Phe Ser Arg Asn His Ala Ala Pro Phe Ser Lys Val Leu Thr Phe
 435 440 445
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 450 455 460
 Gly Val Pro Tyr Pro Glu Ala Lys Ile Gly Arg Phe Val Val Gln Asn
 465 470 475 480
 Val Ser Ala Gln Lys Asp Gly Glu Lys Ser Arg Val Lys Val Lys Val
 485 490 495
 Arg Val Asn Thr His Gly Ile Phe Thr Ile Ser Thr Ala Ser Met Val
 500 505 510
 Glu Lys Val Pro Thr Glu Glu Asn Glu Met Ser Ser Glu Ala Asp Met
 515 520 525
 Glu Cys Leu Asn Gln Arg Pro Pro Glu Asn Pro Asp Thr Asp Lys Asn
 530 535 540
 Val Gln Gln Asp Asn Ser Glu Ala Gly Thr Gln Pro Gln Val Gln Thr
 545 550 555 560
 Asp Ala Gln Gln Thr Ser Gln Ser Pro Pro Ser Pro Glu Leu Thr Ser
 565 570 575
 Glu Glu Asn Lys Ile Pro Asp Ala Asp Lys Ala Asn Glu Lys Lys Val
 580 585 590
 Asp Gln Pro Pro Glu Ala Lys Lys Pro Lys Ile Lys Val Val Asn Val
 595 600 605
 Glu Leu Pro Ile Glu Ala Asn Leu Val Trp Gln Leu Gly Lys Asp Leu
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 Leu Asn Met Tyr Ile Glu Thr Glu Gly Lys Met Ile Met Gln Asp Lys
 625 630 635 640
 Leu Glu Lys Glu Arg Asn Asp Ala Lys Asn Ala Val Glu Glu Tyr Val
 645 650 655
 Tyr Glu Phe Arg Asp Lys Leu Cys Gly Pro Tyr Glu Lys Phe Ile Cys
 660 665 670
 Glu Gln Asp His Gln Asn Phe Leu Arg Leu Leu Thr Glu Thr Glu Asp
 675 680 685
 Trp Leu Tyr Glu Glu Gly Glu Asp Gln Ala Lys Gln Ala Tyr Val Asp
 690 695 700
 Lys Leu Glu Glu Leu Met Lys Ile Gly Thr Pro Val Lys Val Arg Phe
 705 710 715 720
 Gln Glu Ala Glu Glu Arg Pro Lys Met Phe Glu Glu Leu Gly Gln Arg
 725 730 735
 Leu Gln His Tyr Ala Lys Ile Ala Ala Asp Phe Arg Asn Lys Asp Glu
 740 745 750
 Lys Tyr Asn His Ile Asp Glu Ser Glu Met Lys Lys Val Glu Lys Ser
 755 760 765

Val	Asn	Glu	Val	Met	Glu	Trp	Met	Asn	Asn	Val	Met	Asn	Ala	Gln	Ala
770						775					780				
Lys	Lys	Ser	Leu	Asp	Gln	Asp	Pro	Val	Val	Arg	Ala	Gln	Glu	Ile	Lys
785					790					795					800
Thr	Lys	Ile	Lys	Glu	Leu	Asn	Asn	Thr	Cys	Glu	Pro	Val	Val	Thr	Gln
				805					810					815	
Pro	Lys	Pro	Lys	Ile	Glu	Ser	Pro	Lys	Leu	Glu	Arg	Thr	Pro	Asn	Gly
				820				825					830		
Pro	Asn	Ile	Asp	Lys	Lys	Glu	Glu	Asp	Leu	Glu	Asp	Lys	Asn	Asn	Phe
		835					840					845			
Gly	Ala	Glu	Pro	Pro	His	Gln	Asn	Gly	Glu	Cys	Tyr	Pro	Asn	Glu	Lys
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Asn	Ser	Val	Asn	Met	Asp	Leu	Asp								
865					870										

<210> 584

<211> 2918

<212> DNA

<213> Homo Sapiens

<400> 584

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<210> 585

<211> 687

<212> PRT

<213> Homo Sapiens

<400> 585

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Ala Ser Tyr Thr Trp Gln Phe Glu Ala Arg Lys Ala Gln Ile Leu Lys
 35          40          45
Cys Met Glu Cys Gly Ser Ser His Asp Thr Leu Gln Gln Leu Thr Ala
 50          55          60
His Met Met Val Thr Gly His Phe Leu Lys Val Thr Thr Ser Ala Ser
 65          70          75          80
Lys Lys Gly Lys Gln Leu Val Leu Asp Pro Val Val Glu Glu Lys Ile
 85          90          95
Gln Ser Ile Pro Leu Pro Pro Thr Thr His Thr Arg Leu Pro Ala Ser
100          105          110
Ser Ile Lys Lys Gln Pro Asp Ser Pro Ala Gly Ser Thr Thr Ser Glu
115          120          125
Glu Lys Lys Glu Pro Glu Lys Glu Lys Pro Pro Val Ala Gly Asp Ala
130          135          140
Glu Lys Ile Lys Glu Glu Ser Glu Asp Ser Leu Glu Lys Phe Glu Pro
145          150          155          160
Ser Thr Leu Tyr Pro Tyr Leu Arg Glu Glu Asp Leu Asp Asp Ser Pro
165          170          175
Lys Gly Gly Leu Asp Ile Leu Lys Ser Leu Glu Asn Thr Val Ser Thr
180          185          190
Ala Ile Ser Lys Ala Gln Asn Gly Ala Pro Ser Trp Gly Gly Tyr Pro
195          200          205
Ser Ile His Ala Ala Tyr Gln Leu Pro Gly Thr Val Lys Pro Leu Pro
210          215          220
Ala Ala Val Gln Ser Val Gln Val Gln Pro Ser Tyr Ala Gly Gly Val
225          230          235          240
Lys Ser Leu Ser Ser Ala Glu His Asn Ala Leu Leu His Ser Pro Gly
245          250          255
Ser Leu Thr Pro Pro Pro His Lys Ser Asn Val Ser Ala Met Glu Glu

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260 265 270
 Leu Val Glu Lys Val Thr Gly Lys Val Asn Ile Lys Lys Glu Glu Arg
 275 280 285
 Pro Pro Glu Lys Glu Lys Ser Ser Leu Ala Lys Ala Ala Ser Pro Ile
 290 295 300
 Ala Lys Glu Asn Lys Asp Phe Pro Lys Thr Glu Glu Val Ser Gly Lys
 305 310 315 320
 Pro Gln Lys Lys Gly Pro Glu Ala Glu Thr Trp Glu Ala Lys Lys Glu
 325 330 335
 Gly Pro Leu Asp Val His Thr Pro Asn Gly Thr Glu Pro Leu Lys Ala
 340 345 350
 Lys Val Thr Asn Gly Cys Asn Asn Leu Gly Ile Ile Met Asp His Ser
 355 360 365
 Pro Glu Pro Ser Phe Ile Asn Pro Leu Ser Ala Leu Gln Ser Ile Met
 370 375 380
 Asn Thr His Leu Gly Lys Val Ser Lys Pro Val Ser Pro Ser Leu Asp
 385 390 395 400
 Pro Leu Ala Met Leu Tyr Lys Ile Ser Asn Ser Met Leu Asp Lys Pro
 405 410 415
 Val Tyr Pro Ala Thr Pro Val Lys Gln Ala Asp Ala Ile Asp Arg Tyr
 420 425 430
 Tyr Tyr Glu Asn Ser Asp Gln Pro Ile Asp Leu Thr Lys Ser Lys Asn
 435 440 445
 Lys Pro Leu Val Ser Ser Val Ala Asp Ser Val Ala Ser Pro Leu Arg
 450 455 460
 Glu Ser Ala Leu Met Asp Ile Ser Asp Met Val Lys Asn Leu Thr Gly
 465 470 475 480
 Arg Leu Thr Pro Lys Ser Ser Thr Pro Ser Thr Val Ser Glu Lys Ser
 485 490 495
 Asp Ala Asp Gly Ser Ser Phe Glu Glu Ala Leu Asp Glu Leu Ser Pro
 500 505 510
 Val His Lys Arg Lys Gly Arg Gln Ser Asn Trp Asn Pro Gln His Leu
 515 520 525
 Leu Ile Leu Gln Ala Gln Phe Ala Ser Ser Leu Arg Glu Thr Thr Glu
 530 535 540
 Gly Lys Tyr Ile Met Ser Asp Leu Gly Pro Gln Glu Arg Val His Ile
 545 550 555 560
 Ser Lys Phe Thr Gly Leu Ser Met Thr Thr Ile Ser His Trp Leu Ala
 565 570 575
 Asn Val Lys Tyr Gln Leu Arg Arg Thr Gly Gly Thr Lys Phe Leu Lys
 580 585 590
 Asn Leu Asp Thr Gly His Pro Val Phe Phe Cys Asn Asp Cys Ala Ser
 595 600 605
 Gln Phe Arg Thr Ala Ser Thr Tyr Ile Ser His Leu Glu Thr His Leu
 610 615 620
 Gly Phe Ser Leu Lys Asp Leu Ser Lys Leu Pro Leu Asn Gln Ile Gln
 625 630 635 640
 Glu Gln Gln Asn Val Ser Lys Val Leu Thr Asn Lys Thr Leu Gly Pro
 645 650 655
 Leu Gly Ala Thr Glu Glu Asp Leu Gly Ser Thr Phe Gln Cys Lys Leu
 660 665 670
 Cys Asn Arg Thr Phe Ala Lys Gln Ala Arg Ser Gln Thr Ala Pro
 675 680 685

<210> 586

<211> 1898

<212> DNA

<213> Homo Sapiens

<400> 586

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tggagtcgga tggggaaggc cgcggcccca ggggtgggctt tgtggacagc accatcaaga      180
gcctggacga naagctgcgg actctgctct accaggagca cgtgcccacc tcctcagcct      240
cagctgggac cctgtggag gtgggcgaca ganacttcac cctggagccc ctgagagggg      300
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gtatgctagg ctatgacaga gatggaaggc aggtggcctc agactcccat gtggtcccca      540
gcgtccccc      ggatgtacct gcttttgtga gacctgcacg tgtgganccc acanacaggg      600
atggtggana agctgganaa agctcggan agcccccgcc gagtgcacatg ggcanngtgg      660
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gacgaactgc acaanctggt ggacnaatg acaacaanan ngtggggggc ggcgactgaa      1800
acccacnctc naccctnaa ncnnaaccnc aacttccana cattgaggcc cgcaggtggg      1860
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<210> 587

<211> 399

<212> PRT

<213> Homo Sapiens

<400> 587

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              20              25              30
Pro Pro Gln Pro Pro Ser Ala Leu Glu Ser Asp Gly Glu Gly Pro Pro
              35              40              45
Pro Arg Val Gly Phe Val Asp Ser Thr Ile Lys Ser Leu Asp Lys Leu
              50              55              60
Arg Thr Leu Leu Tyr Gln Glu His Val Pro Thr Ser Ser Ala Ser Ala
              65              70              75              80
Gly Thr Pro Val Glu Val Gly Asp Arg Phe Thr Leu Glu Pro Leu Arg

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85 90 95
 Gly Asp Gln Pro Arg Ser Val Cys Gly Gly Asp Leu Ala Leu Pro Pro
 100 105 110
 Val Pro Lys Glu Ala Val Ser Gly Arg Val Gln Leu Pro Gln Pro Leu
 115 120 125
 Val Glu Lys Ser Glu Leu Ala Pro Thr Arg Gly Ala Val Met Glu Gln
 130 135 140
 Gly Thr Ser Ser Ser Met Thr Glu Ser Ser Pro Arg Ser Met Leu Gly
 145 150 155 160
 Tyr Asp Arg Asp Gly Arg Gln Val Ala Ser Asp Ser His Val Val Pro
 165 170 175
 Ser Val Pro Gln Asp Val Pro Ala Phe Val Arg Pro Ala Arg Val Pro
 180 185 190
 Thr Arg Asp Gly Gly Ala Gly Ser Ser Ala Pro Pro Pro Ser Asp Met
 195 200 205
 Gly Val Gly Gly Gln Ala Ser His Pro Gln Thr Leu Gly Arg Ala Leu
 210 215 220
 Gly Ser Pro Arg Arg Pro Asp His Gln Asp Val Ser Ser Pro Ala Lys
 225 230 235 240
 Thr Val Gly Arg Phe Ser Val Val Ser Thr Gln Asp Glu Trp Thr Leu
 245 250 255
 Ala Ser Pro His Ser Leu Arg Tyr Ser Ala Pro Pro Asp Val Tyr Leu
 260 265 270
 Asp Glu Ala Pro Ser Ser Pro Asp Val Lys Leu Ala Val Arg Arg Ala
 275 280 285
 Gln Thr Ala Ser Ser Ile Glu Val Gly Val Gly Glu Pro Val Ser Ser
 290 295 300
 Asp Ser Gly Asp Glu Gly Pro Arg Ala Arg Pro Pro Val Gln Lys Gln
 305 310 315 320
 Ala Ser Leu Pro Val Ser Gly Ser Val Ala Gly Asp Phe Val Lys Lys
 325 330 335
 Ala Thr Ala Ser Cys Arg Gly Leu Leu Gly Pro Ala Ser Leu Gly Pro
 340 345 350
 Glu Thr Pro Ser Arg Val Gly Met Lys Val Pro Thr Ile Ser Val Thr
 355 360 365
 Ser Phe His Ser Gln Ser Ser Tyr Ile Ser Ser Asp Asn Asp Ser Glu
 370 375 380
 Leu Glu Asp Ala Asp Ile Lys Lys Glu Leu Ser Leu Arg Glu Lys
 385 390 395

<210> 588

<211> 707

<212> DNA

<213> Homo Sapiens

<400> 588

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caaaagtgtc acagaagtca tatggaaatg aaanaagggt tttttgcca cctccttggtg      180
tatatcttat gggcantgga tggaagaaaa aaaangaaca aatggaacgc gatgggtgtt      240
ctgaacaaaa gtctcaaccg tgtgcattta ttgggatagg aaatagtgac caaaaaatgc      300
agcagctana cttggaagga aagaactatt gcacagccaa aacattgtat atatctgact      360
cagacaagcg aaagcacttc atgttgtctg taaagatggt ctatggcaac agtgatgaca      420
ttggtgtgtt cctcagcaag cgaataaaag tcntctccaa accttccaaa aagaacagtc      480
attgaaaaat gctgacttat gcattgcctc angaacaaag gttggtctgt ttaatcgact      540

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acnatcccan	acagtttagta	ccagatactt	gcatgttana	aggaggtnat	tttcatgccca	600
gttcacagcn	gtggggagcc	ttttttattc	anctcttgga	tgatgatgan	tccnaaggag	660
aagaattcac	ngtccgagat	ggctacatcc	attatggaca	aacagtc		707

<210> 589

<211> 551

<212> DNA

<213> Homo Sapiens

<400> 589

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ttttgttaac	tttttgccac	actcaagtca	gtttaagtcc	tagcaaaaag	acggtagtta	180
ggataccact	gtggctgtan	atgatgtgac	actggttgaa	tttgtgctgg	cgtttgtgta	240
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gattgtcctt	gctgcactgc	aatgtggccg	cggccctggt	tctggtgtgt	angtaaaggt	360
aaggctgggtg	gaataaatga	ttccaccatt	tccgaccaa	gttactggaa	cctggactgg	420
ttgccggacc	catctccaac	cttctcggaa	tgcanaaatg	tctgggacga	cacagaacat	480
acctctccac	acctgtacat	aatttcagct	tctacatccc	caaaccacac	tcgtaaattt	540
ggantnaaaa	t					551

<210> 590

<211> 478

<212> DNA

<213> Homo Sapiens

<400> 590

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ttttgttaac	ttttngccac	actcaantca	gtttaagtcc	tagcaaaaan	acggtagtta	180
ggataccact	gtggctgtaa	atgatntgac	actggttgaa	tttgtgctgg	cgtttgtgta	240
acttcctcctg	ctgtttgtgt	ttgattcgtn	agggggcacc	tggcttgaat	tggctcgaag	300
gattgtcctt	gctgcactgc	aatgtggccg	cgggcctgnt	tcttatntgt	tgtaaangtn	360
aggntgggtg	aataaatgat	tccatcatnt	cgganccgaag	ttgctgggaa	ctggganngg	420
tngncggaac	catctccgac	cncgccgaaa	ngcagaagtg	ttngtggnag	accggaac	478

<210> 591

<211> 707

<212> DNA

<213> Homo Sapiens

<400> 591

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ttttgttaac	tttttgccac	actcaantca	gtttaantcc	tancaaaaag	acggtagtta	180
ggataccact	gtggctgtaa	atgatgtgac	actggttgaa	tttgtgctgg	cgtttgtgta	240
acttcctcctg	ctgtttgtgt	ttgattcggt	agggggcacc	tggcttgaat	tggctcgaag	300
gattgtcctt	gctgcactgc	aatgtggccg	cggccctggt	tctggtgtgt	aggtaaaggt	360
aaggctgggtg	gaataaatga	ttccatcatt	tccgaccaa	gttactggaa	cctggactgg	420
ttgccggacc	catctccaac	cttctcggaa	tgcagaaatg	tctgggacga	cacagancat	480
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tggantgaaa	ttctgtcctg	taagttcaag	cattnctacg	tccccaccgg	ccatttcaac	600
tgaaaggctc	tctaccacan	ggnacaggaa	atgactgggg	caaggacagg	gcccattccc	660
tcattaaatg	tnataactccg	ccttatcngt	cctaaangaa	tgtncaa		707

<210> 592
 <211> 541
 <212> DNA
 <213> Homo Sapiens

<400> 592
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 cccccccctn ttngtttttn atcctntagg gggcacctgn cttnantngg cncaaaggat 180
 ngccccctgt gcantgcaat ttggccnccg cccctggctct ggtttntagg taaaggtaag 240
 gcnggtgnaa taantaatcc caccattncg naccaaattt actgnaacct gaacngggtg 300
 ccgnacccan cnccancctn cncgaaatgc aaaantttct ggnacaacnc aaacntacn 360
 cncnccaccc ctntnctat ttncagctnc tacntcccca aaccacacnc ntaaattngn 420
 attaaaatcc tntcctgtaa ttccaagcat ggctacttcc ccaccgccat tcaactnaag 480
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<210> 593
 <211> 605
 <212> DNA
 <213> Homo Sapiens

<400> 593
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 ttttgtaaac tttttgccac actcaantca gtttaantcc tagcaaaaaa acggtagtta 180
 ggataccact gtggctgtaa atgatgtnac actgggtgaa tttgtgctgg cgtttgtgtn 240
 acttccctcg ctggttgtgt ttgattcgtt agggggcacc tggtctgaat tggctcgaan 300
 gattgtcctt gctgcactgc aatgtggccg cggccctggg tctgggtgtgt aagtaaagggt 360
 aaggctgggtg gaataaatga ttccntcatt tcggancaaa gttactggaa cctggantgg 420
 ttgncggacc atctccaacc ttctcggaat gcanaaatgt ctggggacaan acnnaacata 480
 ctctctccnc acctggttca tantttcagc ttctacatcc cccaaaccac actcntaaat 540
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 gaaag 605

<210> 594
 <211> 666
 <212> DNA
 <213> Homo Sapiens

<400> 594
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 acttattcct catgcaaaaag ttgcacagaa gtcatatgga aatgaaaaaa ggtttttttg 180
 cccacctcct tgtgtatatc ttatgggcag tggatggaag aaaaaaaaaa aacaaatgga 240
 acgcgatggg tgttctgaac aagagtctca accgtgtgca tttattggga taggaaatag 300
 tgaccaagaa atgcagcagc taaacttggg aggaagaagc tattgcacag ccaaaacatt 360
 gtatatatct gactcagaca agcgaaagca cttcatgttg tctgtaaaga tgttctatgg 420
 caacagtgat gacattgggtg tgttctctcan caagcggata aaagtcattc ccaaaccctt 480
 caaaaagaac agtcattgaa aaatgctgac ttatgcattg cctcaggaac aaagggtggc 540
 ctgtttaatc gactacgatc ccagacagtt ngtagcagat acttgcattg anaaggaggt 600
 aattttccat gccagttccc accagtgggg agcctttttt attcncctctt gggatgatga 660
 tgaatc 666

<210> 595

<211> 600

<212> DNA

<213> Homo Sapiens

<400> 595

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tgtgtttgat tcgttagggg gcacctggct tgaattggct cgaaggattg ctctgctgc      180
actgcaatgt ggccgcggcc ctggttctgg tgtgtaggta aaggtaaggc tgggtggaata     240
aatgattcca tcatttcgga ccaaagttac tggaaacctg actgggtgcc ggacccatct     300
ccaaccttct cggaatgcag aaatgtctgg gacgacacag ancatactct ctccacacct     360
gtacatagtt tcagcttcta catcccaaaa ccacactcgt aaatttggag tgaaattctg     420
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aggcacagga atgactgggg caaggacagg gcccatcccc tncataaaat gtntaatttg     540
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<210> 596

<211> 835

<212> DNA

<213> Homo Sapiens

<400> 596

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ttttgttaac tttttgccac actcaantca gtttaagtc tagcaaaaaan acggtagtta      180
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aaggctgggt gaataaatga ttccatcatt tcggaccaaa gttactggaa cctggactgg     420
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aaggcctcta cacaggcaca ggaatgactg gggcaaggan agggcccatt ccctcataaa     660
atgtatactc tgccttatct gtgctaataa ttgtccagga aacgccanca ttttaccacc     720
tcnttattgg ttcttttggg antggaatgg cctgaaattg aaatattctt ccttgaaaaa     780
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<210> 597

<211> 443

<212> DNA

<213> Homo Sapiens

<400> 597

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tggatgctcg atttctcttg cctctctctt tgccgagctt tccgcnacgg ccgctccgag     180
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gcttgccagt gagaacgata tacatatgtc agtttttgac aagaattgca gcaggaaaaa     300
cccttgatgc ncagtttgaa aatgatgaac gaattacacc cttggaatcn gccctgatga     360
tttgggggtt aattgaaaag gaacatgacn aacttcntga agaaatacag aatttaatta     420
aaattcangc tatngctgtt tgt                                     443

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<210> 598

<211> 491

<212> DNA

<213> Homo Sapiens

<400> 598

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gaggattcag	ttaccgcaga	ctgtttggtca	ctaacctttt	ttcttgatc	caaattagct	180
tcagtttcca	tttcaacatc	attaccacta	ggtttatctt	gagaagttat	tgttcttgtc	240
cttttgcttt	ctactacttt	tgccgctgcc	ttcattagaa	agggtgatga	tttttcaactt	300
agcacataat	tcacataact	cttaattttc	tccatcatgt	ggttgtagct	gaagtgttga	360
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<210> 599

<211> 802

<212> DNA

<213> Homo Sapiens

<400> 599

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gaggattcag	ttaccgcaga	ctgtttggtca	ctaacctttt	ttcttgatc	caaattagct	180
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agcacataat	tcacataact	cttaattttc	tccatcatgt	ggttgtagct	gaagtgttga	360
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atatgagaat	ttggatcacc	aaatattctt	tcaaagactt	cttctgcttc	tttaaagtgtg	480
ccattttcca	tacaaacagc	tatagcctga	attttaatta	aattctgtat	ttcttcatga	540
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<210> 600

<211> 523

<212> DNA

<213> Homo Sapiens

<400> 600

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gccaggaggc	gtggaggggc	ccagggatgg	ccacccccac	agggagtcag	ggagggcctg	180
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gggctttcct	gtcacaaana	ttaaaaaccc	ccnaaatgca	tttgaacaac	atnatacacn	360
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cctgggtcca	tcccaggggc	ccagcctccg	atnactcttc	anaaacacng	ccttnttget	480
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<210> 601

<211> 530

<212> DNA

<213> Homo Sapiens

<400> 601

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ccaaaangct	tnaaggggcc	cagggatngc	cnccecnca	gggattcngg	gagggcctgg	180
ggcaanancg	naaagggtta	ccntcnaaaa	ggtcaattnc	taccgtgnaa	aaatnatctn	240
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ggctttcctn	tnncaaaaat	tnaaancccc	cnaaatgcct	ttnaacnact	ttntnccan	360
tnncaatttt	naaccttgc	cctctntccc	actgggtnaa	ccctggccca	tccccatec	420
ctgggtccnt	ccnnggggcc	cacccccna	taacttcctc	aaaaaccngc	cttnttctg	480
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<210> 602

<211> 311

<212> DNA

<213> Homo Sapiens

<400> 602

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gganccgctg	cggntnccgn	tgtgccnctt	ggtgcnccga	anancanggc	tacngnttct	180
acctntacgt	gtganannng	ccgcgcggg	cacttctntcc	ggcgcgtgna	ncctctgttc	240
ccccgcgcag	gongccgcgc	tgtgctctgg	ggatctnctg	ntcnagggtca	acntgcntca	300
acgtgnaggg	c					311

<210> 603

<211> 289

<212> DNA

<213> Homo Sapiens

<400> 603

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tatnangaan	anaaccatca	ncnncntcc	ctttcantca	tctggcnctt	gcanaccatc	180
tttcgccctc	tnccccccgc	tgtctctcna	ctcccntgac	cncctctcatc	tctctcncct	240
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<210> 604

<211> 356

<212> DNA

<213> Homo Sapiens

<400> 604

ctgaagccac	cgccgggtgc	ccagcgccgc	cgccgcccc	gagctcccc	gcgcccctgc	60
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tgtgccgctt	ggtgcgcgga	nagcanggct	acggcttcca	cctgcacggt	gagaanggcc	180
gccgcgggca	nttcatccgg	cgcgtggaac	ccgggttccc	cgccgaggcc	nccgcnctgc	240
gcgctgggga	ccgcntgntc	naggtcnacn	gcgtcaacnt	ggagggcgat	accaccnctt	300
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<210> 605

<211> 290

<212> DNA

<213> Homo Sapiens

<400> 605

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nnantcgact	nccaccaact	gtnnntcttc	cttcctttcc	cnangtccct	anntaccncc	180
tnttgccctt	ctnccccctn	tttccccctn	cgctttccct	naetctttat	ctntcttntc	240
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<210> 606

<211> 714

<212> DNA

<213> Homo Sapiens

<400> 606

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atgcagataa	ttaaacttac	atgaaaaagg	aaaattataa	caaaggactg	agaacgttat	180
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aaaaatattt	ttatttttaa	aataagcctg	tgttcaagct	ctgatcatat	ttcttttatt	360
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attactggcc	agctgtttgg	attgtgtttc	ttacttagtt	ctcccaaggg	aaaactctta	540
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tgtttacata	gttctttggg	attttactgt	tcctaatttt	attctgaaac	tcaattttac	660
cccagaccat	aattaccata	ttacttttgt	tntgcacagt	tgtttgccaa	ttca	714

<210> 607

<211> 687

<212> DNA

<213> Homo Sapiens

<400> 607

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acttacatga	aaaaggaaaa	ttataacaaa	ggactgagaa	cgttataaat	tgaaatgaga	180
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tgttttatga	ctaatacact	gatttttcaa	taaggaaacc	catgttaaaa	atatttttat	300
tttaaaaaata	agcctgtgtt	caagctctga	tcataattct	tttattttga	tttgggaaga	360
aaatactgtt	tctgatagca	tgaaatgcaa	aattttttaga	tttttaattct	cnctaatttt	420
agaactatt	gagaaattga	ttaatgacat	gaagtgcaca	acactaatta	ctggccagct	480
gttggcattg	tgtttctttac	ttagtctctc	caaggaaaaa	tcttaaaactg	aatcttcagc	540
ngaataacct	taaatatact	ttgttagcca	aacaaaactt	ttttgtttac	atagttcttt	600
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<210> 608

<211> 994

<212> DNA

<213> Homo Sapiens

<400> 608

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accgcgtatc	ccagttccaa	gatgaataca	gttttagatga	agtgatggca	tctaaagaag	180
tttttgattt	tttgactatc	ttacaatgtt	gtcccacttc	agatggtgct	gcagcagcaa	240
ttttggccag	tgaagcattt	gtacagaagt	atggcctgca	atccaaagct	gtggaaattt	300

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caccaaata	tattgacgta	atagaacttc	acgattgctt	ttctaccaac	gaactcctta	480
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ataatacata	tggaggaaa	tgggtcataa	atcctagtgg	tggactgatt	tcaaagggac	600
accactagg	cgctacaggt	cttgctcagt	gtgcagaact	ctgctggcag	ctgagagggg	660
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atttgtagaa	gaaaaatncg	gngggaattt	ttgcccttca	aggggaaana	atggccctgg	960
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<210> 609

<211> 843

<212> DNA

<213> Homo Sapiens

<400> 609

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tngcaaatana	ttaaccttnc	ttgaaaangg	aaatttntac	caanggacng	aaancnttnt	180
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aaaantnttt	tnatttttaa	aataaccng	tncccaacc	cngatcanat	tccttttntt	360
tggattgggg	aaaaaaatnc	ngttccnnat	accnngaann	gcaaantttt	ttaaattttta	420
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ttncnggcca	cngtgggcn	tngtnttctt	tacttantcc	cccccaaggaa	annccttaan	540
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tttacntant	ccttgggatt	taacgggtcc	ccaatttnat	cnngaaccce	nttttcccc	660
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<210> 610

<211> 707

<212> DNA

<213> Homo Sapiens

<400> 610

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gttcagtgtt	ttaatctgac	gcaggcttat	gcggaggana	atgttttcat	gttacttata	180
ctaacattag	ttctcttata	gggtgataga	ttgggtccaa	tgggtgtgag	gagttcagtt	240
atatgttttg	gatttttttag	gtantgggtg	ttgagcttga	acgctttctt	aattgggtggc	300
tgtcttttag	cctactatgg	gtgttaaatt	ttttactctc	tctacaaggt	tttttcttag	360
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tgtgtctctt	tanctgttct	tangtanctc	gtctgggttc	gggggtctta	gctttggctc	600
tccttgcaaa	gttattttcta	agttnaattc	attatgcnc	angtataggg	gttagtctct	660
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<210> 611

<211> 663

<212> DNA

<213> Homo Sapiens

<400> 611

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ccattttata atgcgcttta tttgattaaa gaatttgctt tctttgtata cactggaatg      60
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aaagtaatct canaaaaaaaa agggtttttg aaattaaact tgacttttaa aaaatcatac      180
ggacaaacaa ctttcaaaca aaactggatt agtaggattt cttgcctgct taactaacat      240
gacanacttc ttgtcccagg cccttctcan aaaaacctca tgtggaaacc aagctanaga      300
taanaattct tccctgatgc agttagggga aagggaaggg ctgaaactt ctttggcaag      360
caattccaca cacagccatt tatgtgtgag tgctctgctt caagcacagt acgctctttg      420
cagggacggc cagatgttca gagtgggagt ggtacttttc aaccagctaa aagtgcagaa      480
gtcatctant cgtctgcctc tcccactgc cagtgcctgc agccttgtag caacttttaa      540
ccacccccta tgggactgga atnttgagtt aaaaagccaa ngctgaactg gctgacgctg      600
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tga                                                                                   663

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<210> 612

<211> 621

<212> DNA

<213> Homo Sapiens

<400> 612

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aagtaatctc anaaaaaaaa gggtttttga aattaaactt gactttttaa aaatcatacg      180
gacaaacaa tttcaaaca aactggatta gtaggatttc ttgcctgctt aactaacatg      240
acaaacttct tgtcccaggc ccttctcana aaaacctcat gtggaaacca agctananat      300
aanaattctt ccctgatgca gttaggggaa agggaaaggc tagaaacttc tttggcaagc      360
aattccacnc acagccattt atgtgtgagt gctctgcttc aagcacanta cgctctttgc      420
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tcatctantc gtctgcctct tcccactgcc agttgcctgc agccttgtag catcttttaa      540
ccacccctat nggactggaa tattgaatta taaaccnngg ntgaactggc tgangetggt      600
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<210> 613

<211> 637

<212> DNA

<213> Homo Sapiens

<400> 613

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catttnataa tgcgctttat ntgattaaan aatnngcctt ctttgtatac gcnggattgt      60
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tantntnctn aaaaaaaaga gggttganga aattaaactt gactttttaa anactatgng      180
gacaaacnac tttcaaaca agctggatta gnaggatttc tngnctgctt aactaacatn      240
aaanacttct tgtcccaggc cctnctnaaa aaaacctctt gtggaaaccn agcnaaaaaat      300
aanantttct ccctgatgca ntggggggag anggagaggc taaaaacttc tntggcaanc      360
antccacnc acngccattt ttntntnagt gcnctgctnc nancnnagta cgctctttgg      420
gnggacggcn anntnttnat agngggagtg gtnttttcaa ccagctaata ntgaagaaat      480
catctagtcg nctgcctctn cccactgcca gtgcctgcnt ccttgcaacn tcttttaacc      540
ccccctangg acnggattat nnagttaana ccgaggntga gctggntgac gctntctcct      600
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<210> 614

<211> 673

<212> DNA

<213> Homo Sapiens

<400> 614

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agattatgcc attgaggcta agaataagagt cttttttgat ctaatttatg aatacgaaag      60
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cttgaaggct acaagtggca aggaagattc tatttcaaat atagccacag aaataaagga      180
tggaacaaaa tctgggacag tgtcttctca gaaacaaccg gccttgaagg atacaagtga      240
caaggatgat tctgtttcga acacagccac agaaataaaa gatgaacaaa aatctgggac      300
agtgttccct gctgttgaac agtgtttaa caggagtctc tacagacctg atgctgttgc      360
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agtttgcttt ggaatctgag aatatttcag aaccatactt tacgaacaga aggactattc      600
tcaacaatct gcagaaaatt tagatgctgc atgtggcatt gacaaaacag aaaatggana      660
catgtttgaa gac                                     673

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<210> 615

<211> 714

<212> DNA

<213> Homo Sapiens

<400> 615

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cctctggcta tattcaaaac agaatctttc tcatcacttg aagccttcaa gcctgggtggt      60
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acagaatctt cctcgtcact tgtacccttc aagggtgggt gtttctgana anacactttc      180
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<210> 616

<211> 688

<212> DNA

<213> Homo Sapiens

<400> 616

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cctctggcta tattcaaaac agaatctttc tcgtcacttg tagccttcaa gcctgatggt      60
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<210> 617
 <211> 721
 <212> DNA
 <213> Homo Sapiens

<400> 617
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 gccgagggct gccgggtccg gctccgctca gcacctcaa cggcgagatc agcgccctga 480
 cggccgangt gagatccaga tccgaccact anatcatcct tataccgacg gggaaacnga 540
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 atgcnggggt ncctaaggac cttggaaaaa acgctccccc gtcgttgctt cctgggggaan 660
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 c 721

<210> 618
 <211> 461
 <212> DNA
 <213> Homo Sapiens

<400> 618
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 aaaancacca ancttnacca ttttttaaan tttctgcttt ncaaaaaanta aaaacnncna 180
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 ccaacncaaa atgcaatent ccncagnaac cntgcccgc t 461

<210> 619
 <211> 751
 <212> DNA
 <213> Homo Sapiens

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 cccagggcct ggcaggaacg tcacagtggc ctcgagcagg agcccccggt gccttatcgc 180
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 ccatccacgt gctccgcagc cacnccgtgg gcacagccgg cgacatgcac acgctgctgc 300
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 caggcctggt tggaggcagc caccocgagg acggcctcgc aggcagcacc agcctcatgc 420
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 aactgaaggc ccccgggccc ggaccattac ggaacaagtg ctgtcccttg naggagaaaa 660
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 atattaacna aggcttccgg gaactggggg c 751

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<210> 620
<211> 556
<212> DNA
<213> Homo Sapiens
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<400> 620

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gcaaaaaaag	cttaaaaaaa	ccaaaaacca	aaggcagcat	ccttgcta	tttcatctac	180
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aagtgtatgt	tttgttgctt	gctttcaggt	tttgtttact	ggaaaaaaa	aaaaatgcc	420
tgtcanccca	ngcaanaggg	ccaanatgca	attcagggat	cctggggaca	gggtccaaaat	480
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<210> 621
<211> 708
<212> DNA
<213> Homo Sapiens
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<400> 621

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caacaaaaac	ttgtttaaat	ngttccttna	atttnnacta	cttaaaaanca	taggtntaaa	180
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aaaaactnat	atattccaaa	ttcneggcac	ntggnaatnt	tnccatggac	nctgnatctt	300
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tggatnanaa	ccnttttcta	catnactatt	gaaaaaacct	gtggtttctt	gctttttaac	660
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<210> 622
<211> 675
<212> DNA
<213> Homo Sapiens
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<400> 622

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gatttctcaa	acttaaattc	aagaaggagc	cctgtcccg	ctcaaatagc	tataactgta	180
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gaattggagc	ttanagctga	agaggagcct	tccattgaca	aagtacttga	atctgancaa	300
gatntaatga	gccaggggtt	tcatectgaa	agagaccctt	ctgacctana	aaaagtga	360
gctgtggaag	aaantggaga	anaagctgag	ccagtnctga	ntggtgctga	gagtgtctct	420
gagggtgaag	gantagatgc	tacttcaggc	tcncagata	gttctgggtga	tggggttacn	480
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ngggagttct	gctggacttc	cagttcatgc	ctgcctggta	tnctttnccc	gagggcctgc	600
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tctgggatcc	ttcga					675

<210> 623
 <211> 713
 <212> DNA
 <213> Homo Sapiens

<400> 623
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 tcgtgcacac gtggggggtt ctgcgagaat tggccttgct gcactgtgat tggcgaanac 240
 gtgaaacttt ttaaaaaaat acttaaattg tttcttttgt ttcatTTTgt gtatttgaag 300
 ttttagttat cctcagactc ctcttctgct tcccgcagcc acgtgaagaa tgccgtgaca 360
 gatttcagag ccacgccctt cccattctgc tctgcagggt ccttgctgct ctcccatttg 420
 tagaaggcat cctcggagat cacctcctcg tcatatagac aatcaaaaaa catccgcagc 480
 aaattggcag gttgatcaag ttttactatc gatgcttgta gtgcataaag tgctgcagtt 540
 ccttctctgt atctgantct aggtacttga gtaagatcgg cactctctgc ttgataacag 600
 cagtgtccac tctgaaggta naagaatcng gttattatag cttgctttta caaacagcng 660
 tcnttaaagc tctaaggaat gttangtgaa atncactgga tttcgtctaa att 713

<210> 624
 <211> 554
 <212> DNA
 <213> Homo Sapiens

<400> 624
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 tggctatctt cnaggatttg gttggtaaat gtgacctcgc agaanaagca gcgaaagaca 180
 tttntgccac caaagttgaa actgaagaag ctactgcttg tttagaacta actttnatcc 240
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 ccagaganaa natgaatccg attcattgat tcaagagctt gagacatctg ntaaganaat 360
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 tatcancgaa tttcagaacc tnangtctca tatggaaaac tcnttttaaat gcnatgacaa 480
 ggctgataca tcttctttta taataaacia taaattgatt tggttatgaaa cagttgaagt 540
 acctaaggga cagc 554

<210> 625
 <211> 551
 <212> DNA
 <213> Homo Sapiens

<400> 625
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 tgggggatgg taatgggtac aaaaacaaat aagatnaaaa gaatgattta atatctgata 180
 gcacaatana ntgactataa tcaataataa cttacttgta tattttttaa tgatctaaaa 240
 aatgtaattg gattatctgt aattcaaagg aaaaatgctt gaggggatgg atacctcatt 300
 ctccatgata cacgtntttc acattgatgc ctgtgtcaaa acatctcaca taccctgtaa 360
 atatatacat gtactatgta ccacaaaatg tttacaaaat aagtganaca ttctaattaa 420
 agactgaaat ctttttctaa ataattgata tacatgtttt gtgatctgta cacacttatt 480
 ctccaaatcc taactntant cccaacanat atnttaaate cttggtttanc ngaataagtt 540
 aaaaaaatcc t 551

<210> 626
 <211> 680

<212> DNA

<213> Homo Sapiens

<400> 626

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cgcanaaatg	caaagacgcc	tgagttatac	aacttgcaat	tattatTTTt	tanacagaag	180
tgccaactgt	tgtgctttcc	agtgtatcag	tggttgctac	attctccttc	ttgtcttcgg	240
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cgactcgatc	aatgcccatt	ccccagccag	ctgtgggggg	cagcccatat	tccagggcag	360
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gttcttcaaa	aanctgccgc	tgccgcattg	gatcattcag	ctcagtatac	gcattgcata	480
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acttccanga	actccccaac	aancttgtca	aggaacctgg	ctgtggtcca	angtgaagg	660
catccacanc	ttttgcccc					680

<210> 627

<211> 753

<212> DNA

<213> Homo Sapiens

<400> 627

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tcttagggga	aaagccagag	cttccagatg	gaggtgatga	tgatgacatt	atancagaca	180
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tgactgtggt	ggcanaagaa	aacctcttct	cantggcaat	gctgctgtct	gaagaatgct	300
ttatTTTtga	ccacggggct	gccaaacaaa	ttttcgtatg	gaaaggtaaa	gatgctaatt	360
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gagaaagtgg	ctcaantnna	acnaattccc	tttgatgcct	cnnaattacn	cagttctccg	600
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gtncaaaaca	atggttaggat	ccaagttgac	cnnaactcct	atggtgactc	ccatggtggt	720
gactgctact	tcatactcta	cacctatccc	tga			753

<210> 628

<211> 675

<212> DNA

<213> Homo Sapiens

<400> 628

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gttaaancca	ccttaacata	aaccttatng	caattntaca	cntcttttga	acncaatcta	180
taaaaaataa	aataactncc	anggcattac	aacttttnct	ctggcatntt	aaaaaacaac	240
tctnactaat	ggctaattgca	ttataaaatt	ncctatctna	caaactctnc	taaattatgc	300
atagtatttt	acttttnaaa	ggtcntaaaa	aaaatataaa	tcanttncca	taaaanctaa	360
tatnggccca	taacaaaant	tccctncagg	ttattttta	ntnttaacnt	aaaaaaacnc	420
cagntgaaaa	aaaattncaa	nccaaaacta	accnttaaaa	aataggcctt	nggttnaggt	480
taattttttt	tttttttttt	ttgnaaanaa	antcncnttt	gccagncctg	gattgtgggtg	540
gcnccaatcc	tggtcactg	caacctcagc	ctcctggggt	caagcaattt	ncctgtctca	600
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tttttttant	aaaag					675

<210> 629
 <211> 677
 <212> DNA
 <213> Homo Sapiens

<400> 629
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 gattaaatca tgttcttacg aacgacctga cagccaagan gtcctacat gtgaagggtc 480
 gtanagtggg gagagccaca gaattcccct tagctgggac agtttcaaca aggggtgactg 540
 cttcatcatt gaccttggca ccgaaattta tcanttggtg tggttcctcn tgcaacaaat 600
 atgaacgtct gaaggcaaac cangtancta ctggcattcg gtncaatgaa aggaaaggaa 660
 ggtctgaact aattgtc 677

<210> 630
 <211> 665
 <212> DNA
 <213> Homo Sapiens

<400> 630
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 ctacagcctcc tgggttcaag caattttcct gtctcagcct tccaagtagc agggactaca 120
 ggcgtgcacc accacgcgca gctaattttt ttgtattttt agtaaaggcg aggtttcgcc 180
 atgttggcca ggctgggtctc gaaatcctga cccagtgat ctgcctacct catcctctca 240
 aagtgtctggg attacaggtg tgagccaccg cggccagcct taattttcaa aagacaaata 300
 agcaaaaagc ttttcccgtt cctctcccaa aacagcaatg agataactgc cttgtaatgt 360
 ttgtttgctt tttacaaata ccaatttacc acttgctgga atcccagccc aggaaccagc 420
 ctgtgaatgt ggggtggetca tggccctgtt ttatgatgac aattgggtgtc ctcttgtctc 480
 ttccagaagg gtctgtctca aggtacattt tggcanactt caaagattct tttttctcaa 540
 cttcattagc atctttgcc atccaaataa atatctgttc ccaagcatct agtaacatga 600
 catcatcttc agctaaatca tcttgggtga actctcctcg gaatctcttc aataacaaat 660
 ctccc 665

<210> 631
 <211> 698
 <212> DNA
 <213> Homo Sapiens

<400> 631
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 tgatgttact ggtcaatggc agtaatcctg aagggtgaaga tctgagagg gaacctgtan 180
 aaaatgaaga ttatagagaa aagtcttcag atgatgatga aatggattct tcttgggtct 240
 ctacagcagc tcccgataac caggaaaagg aacgactaaa tacatccatt ccacaaaaaa 300
 ggaaaatgag aaatctgtta gttaccattg agaatgatac tctctagag gaactctcaa 360
 aatatgtaga catcantatt attgccctta ctcgaaatcg gaggacaagg agatggtaca 420
 cttgtccact gtgtgggaaa cagtttaatg aaagttctta cctcatttcc caccagagga 480
 cccacactgg agaaaaaccc tatgactgtn ntcactgtgg gaaaagcttc aatcatnaaa 540
 caaacctcaa taacatgag cgaattcnta caggagagaa accttattcc tgttctcagt 600
 gtggaaaaaa ctcccgctng aattctcatc ggagtcgtcc tgaagggaatc catntaacgg 660

agaagatatt aagtgtccan aatgtgggaa aacctccc

698

<210> 632

<211> 466

<212> DNA

<213> Homo Sapiens

<400> 632

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ttaaacaggt	attccttagag	ggttatatga	attgctatca	gaagctgttg	gctaacaagc	180
cagtaatttg	gttctttcac	canaacacag	ttccagataa	gcatctttgc	actatttctc	240
aantatgaat	ccccatgtgg	ggggaaaacg	gatatacttt	caatagacac	aagtcactct	300
ttgccttcca	agtaagcana	ctccagattc	atcttcaaag	tggtgggaaa	ngggatctgt	360
gacctgtnc	ttatcatata	acttcaaaaa	ggaaagctcc	ttantccaaa	aagcctanat	420
gctgaggtat	agcccttgaa	atgttttctt	ccctgtnaat	ttccta		466

<210> 633

<211> 734

<212> DNA

<213> Homo Sapiens

<400> 633

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gcctccaagt	gaacttaaca	tattgcctat	gcatctgatt	ctttatanac	ttttanattt	180
taaaactaaa	tttganaaac	catgcatact	gtatacctta	tttaataatc	caaanaattg	240
tttgactttt	caaaaaagtt	acaaaaaggc	tgaacacaag	ttaaataacc	tatatgatgt	300
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gattgtcaga	nacgcttcag	taaattatct	ctactttaaa	attatatctg	aatccccctt	420
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taaataagaa	ccaaacttgt	agactgaata	ttttaacctt	aaaattatat	acctatatat	540
ncacctatgg	tatgctgcat	attaaattta	acatttcaag	taacatatat	atagcaaaca	600
ttcagccaaa	tactctttca	tgaaaagata	ctgtccctta	aataaaaaag	tantgaaaag	660
cttattttag	ccnaatgtct	aaatataant	nctaagccta	tgaaacttga	anctaaagtc	720
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<210> 634

<211> 822

<212> DNA

<213> Homo Sapiens

<400> 634

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tgtaaataatt	gtacttttca	aactccagat	ctaaatatgt	ttacttttca	tggtggattcg	180
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agaattctaa ttgtattccc naagtcttaa tccctgttna tancatcccc cctacaatgc 780
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<210> 635

<211> 819

<212> DNA

<213> Homo Sapiens

<400> 635

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 gtctccatca tattagaaga aaaatgtact gtattaaaat ttaaattgca tttttacaag 240
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 tacctaattc tgatctctc tgtcttctg caaaccatc tctgacctgc tcatanccca 660
 tatgtgattt gtttaacaaat tcatcaaggt cttgtctatt aaaaaacttg tgcttcaggt 720
 tataatcctt aanttttgcc gttccagttt taaattttat gaatnaatgg tccctgggtc 780
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<210> 636

<211> 704

<212> DNA

<213> Homo Sapiens

<400> 636

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 aaaggaaaaa aatatttttc aaantccatg tgaaattgtc tcccattttt tggtttttgg 180
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 aaggtcacct ggatgccaca tngcanggt cggaaacctg gccgccatac cccaactggg 660
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<210> 637

<211> 693

<212> DNA

<213> Homo Sapiens

<400> 637

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tcacattttac	taaaaccaac	attgtggtat	ttctttttcca	ttatctttctt	cactgggttct	420
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tgggcctttt	angatcaatc	accttcccca	ttcaatttat	gttctttttg	gatccatgaa	660
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<210> 638

<211> 619

<212> DNA

<213> Homo Sapiens

<400> 638

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tgattgatcc	taaaagggcc	aaagccatga	aaacaaaaga	gccgggttaa	aaatttttgt	180
tgggtggcctt	tctccagata	cacctgaaga	gaaaataagg	gagtactttg	gtgggttttg	240
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ctttattacc	tttaaggaag	aagaaccagt	gaagaagata	atggaaaaga	aataccacaa	360
tgttgggtctt	agtaaatgtg	aaataaaaagt	agccatgtcg	aaggacaat	atcagcaaca	420
gcaacagtgg	ggatctanag	gaggatttgc	angaagagct	cgtggaagan	gtgggtggccc	480
cactcaaaac	tgggaaccang	gatatannta	ctattggaat	cnaggctatg	gcaactatgg	540
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<210> 639

<211> 694

<212> DNA

<213> Homo Sapiens

<400> 639

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ngccagggan	aggcgcagga	gcctttgcag	ccacgcgcgc	gccttccttg	tcttgtgtgc	180
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gancantctg	gcggggacgg	ggcggcgcca	ncggcaacgg	cggcggtagg	cggctcggcg	360
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<210> 640

<211> 728

<212> DNA

<213> Homo Sapiens

<400> 640

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tagaattcca	ctttgaaccc	cacgactact	ttaccaactc	agtcttgaca	aaaaccttac	720
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<210> 641

<211> 732

<212> DNA

<213> Homo Sapiens

<400> 641

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caaaatcttc	atccagtgat	ctccatcccc	ggatgctttc	caatggattg	aagaaattga	600
aaaaggactc	attgggtact	gtttcgtaat	tgttcttaaca	gtgcctcaac	cttatgtctc	660
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<210> 642

<211> 582

<212> DNA

<213> Homo Sapiens

<400> 642

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naaggcgctg	cctgatttcc	tcaagctcct	ccttctctct	cttcttatct	cgttcatctg	180
cttccatttc	cttttctcta	tcacgcaacc	ttttctgaaa	agcacttctt	ctgtaatat	240
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gttttttgct	tttttctctt	tctcgctccc	gttctctctt	cncctctctt	ctcgtctccc	540
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<210> 643

<211> 784

<212> DNA

<213> Homo Sapiens

<400> 643

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aagaaattct	tcttgaaaga	gccagtcaga	aacgtggaga	attgcaaact	aaactcaaga	180

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aaaaaacagt	agttttgcca	cccattgttg	ccagcagagg	acaatcagag	gagcctgcag	420
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aagangctcc	gggtgagaac	nccggggttg	acctccctaa	aattccagtc	cagagatgtn	720
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<210> 644

<211> 749

<212> DNA

<213> Homo Sapiens

<400> 644

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tatttttttaa	aaaagcaaaa	naataaagaa	tatatacaaa	agggacctgn	aatctgtaag	180
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tctatacata	aacttcagtc	atttttgctt	gtgcanaatc	atcccaatct	tcccaanact	360
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canatttccc	tatgagaaac	aaaactggcc	acctacagca	aaatatcaaa	atgggtaagt	540
ccttccttcc	tcttcctcct	gattatatac	aacatatctc	ctttcaagac	tattatttcc	600
atcatgctta	ttccttcaca	aatctaaacc	ttgaggtgat	atgaaggaaa	ccancntcaa	660
aaaaaagaaa	actcaattcc	gaaatgaana	aaactgggcn	nggtatncaa	tacnccccan	720
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<210> 645

<211> 751

<212> DNA

<213> Homo Sapiens

<400> 645

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acaaaattat	tttttaaaaa	agcaaaaagaa	taaagaatat	atacaaaaagg	gacctggaat	180
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caanactgaa	tgggcagtc	tgtggctttc	ttccttttcc	atattcccaa	caaggctacg	420
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tatttccatc	atgcttattc	cttcccaaat	ctaaaccttg	aagggtgattt	gaagggaaac	660
cnccatccnn	aaaaagaaaa	acccattccc	aaattgaaaa	aaaactnngc	agggtatata	720
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<210> 646

<211> 760

<212> DNA

<213> Homo Sapiens

<400> 646

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tattttttta	aaaagcaaaa	gaataaagaa	tatatacaaa	agggacctgg	aatctgtaag	180
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ctttggagaa	gggctatcat	acaacattca	gtcagctgaa	natggattgg	tagagggtgtg	300
tctatacata	aacttcagtc	atctttgctt	gtgcanaatc	atcccaatct	tcccaanact	360
gaatgggcag	tctgtgggct	ttcttccttt	tccatattcc	caacaaggct	acgtgaagtt	420
caactcttga	tgagccgctt	acaacagcag	ttccttagga	gccaacatga	cagggtgggtc	480
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aaagaaaact	cnantcanaa	atgaaaaaaa	ctggcaggta	tncaatacac	cccaaaaact	720
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<210> 647

<211> 1041

<212> DNA

<213> Homo Sapiens

<400> 647

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actaacattg	acaaaccac	caaagaaagc	tcaagnttcc	aagtcacctc	agggaccgan	960
taagcatgtc	aaccggatca	anataatgng	gntgcaacag	ttaaagntta	aaaaattggg	1020
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<210> 648

<211> 810

<212> DNA

<213> Homo Sapiens

<400> 648

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ttatttttta	aaaaagcaaa	agaataaana	atatatacaa	aaggacctg	naatctgtaa	180
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gtctatacat	aaacttcant	cattttttgct	tgtgcaaaat	catcccaatc	ttcccaaaac	360
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tcaactcttg	atnagccgct	tacaacagca	gttccttagg	agccaacatg	acagggtgggt	480
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tccttccttc	ctcttcctcc	tgattatata	caacatatct	cctttcaaga	ctattatttc	600
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<210> 649

<211> 656

<212> DNA

<213> Homo Sapiens

<400> 649

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<210> 650

<211> 645

<212> DNA

<213> Homo Sapiens

<400> 650

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<210> 651

<211> 780

<212> DNA

<213> Homo Sapiens

<400> 651

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<210> 652

<211> 518

<212> DNA

<213> Homo Sapiens

<400> 652

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<210> 653

<211> 490

<212> DNA

<213> Homo Sapiens

<400> 653

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gattctactt caggagcaag aagctcctcc actatccgta tcaaaaacctt ctctgaggtc 180
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490

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<210> 654

<211> 359

<212> DNA

<213> Homo Sapiens

<400> 654

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<210> 655

<211> 611
 <212> DNA
 <213> Homo Sapiens

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 cncnnaaaga ncagggatga angaagagaa gaaccttcag gaaggaaatg aatttgattc 360
 tcagancatt attataactg aagctnnana ngcttcnggt gagaccacng ganttgacat 420
 cactaaaatt ccagtcaaga gatgtgagac catgagagag aagcacatgc acaaaacanc 480
 nngagagggg aaaatcagtc ttgacacctc ttcggggaga tgtagcatct tgcggnaccc 540
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<210> 656
 <211> 634
 <212> DNA
 <213> Homo Sapiens

<400> 656
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 tattttttta aaaaancnaaa naataaaagaa tatntncaaa agggacctgg aatctgtgag 180
 ctgattccaa aaacnaaata anttnaaaat ccntgggtgaa acctgaacat tctacctctg 240
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 tctatacata aacttcagtc atttttgctt gtncaaaatc atcccaatct tcccaaaant 360
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 aatttcccta tnaaaaacaa aactgggccc tacagcaaaa tatccaaatg ggtgagtcct 540
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<210> 657
 <211> 958
 <212> DNA
 <213> Homo Sapiens

<400> 657
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 aggcagtgt catcaagata ctgctgaaaa gaatgcatct tccccagaga aagccaaggg 180
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 atctcctgcc cgagtgacta agggatgtac cattgttaag cctttcaacc tgtcccaagg 540
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 cctgttaccc tccaaatctt ctgtgaccaa gatttgaga gaccacagg actcctgtac 720
 tgcaaaacaan acaccgtgca cgggctgtga cctgcaaaaa gtacagcaga gctggaggct 780
 gaggagctnc gagaaattgc aaccantaca anttccaaag cacgtngaac cttgattccc 840

agaataactt ganggggtggg cccaaccttg cccaagaaaa ccaccngtga aancaancca 900
acggagccct antnggcttt gatttgggaa tttgggaaan gaatncaagg gaggnngag 958

<210> 658

<211> 816

<212> DNA

<213> Homo Sapiens

<400> 658

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gcctgctgctg tggctgctgt gaggtcctcc atgaatccac gcagtcttct tcctcactgg 180
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taaattctag tcagagtga gaccatataa aaggccggct gatgggttaa aggaagtaac 480
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cctagggttg aagttaaaaa caggtcccaa ttgcccgggc ggtatccgcc agctcacagc 720
tgaatttaan catggaaatc caatggaaaa attggganat acnggcacat tcanaaggct 780
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<210> 659

<211> 726

<212> DNA

<213> Homo Sapiens

<400> 659

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cttggatgat gaaggagata ctcaaaacat agattcatgg tttgaggaga aggccaattt 180
ggagaataag ttactgggga agaatggaac tggagggctt tttcagggca aaactccttt 240
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tcttaggctt tctgctcaga aggatttgga acagaaagaa aagcatcatg taaaaatgaa 480
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aaagaatgca tcttccccaa gagaaagcca agggtagaca tactgtgcct tgtatgccac 660
ctgcanagca gaagtttcna aaangtactg angagcaang aatctggaga agagtatgaa 720
aatgc 726

<210> 660

<211> 824

<212> DNA

<213> Homo Sapiens

<400> 660

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tcagagtga naaccatata aaaggccggc tgatgggtta aaggaagtaa ctacatggag 180
tctaatcgag acattcatga gttacatctc attattagcc ttagtaatgt aagaaaacaa 240
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aagtctggan	aaatgggttc	tctccatgcc	caatgacaaa	gcaagacggt	cctaggtttg	360
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ggaatcgagt	ggagaatttg	gggagataca	ggcncagtc	gaggctggtc	acttgacttt	480
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<210> 661

<211> 399

<212> DNA

<213> Homo Sapiens

<400> 661

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caaaacctnc	tgcttggtcg	ctttaaggnc	cccataannc	cccccatnnt	cctccccccac	180
tggtncattg	gttaggtttc	ctcccccccn	ccaaaggmnt	ccttacntat	aaatcccngg	240
tttncaaaaa	aaaananaaa	accaattttn	gatnntcccc	cttnaancca	gnacttaatc	300
cctntctnag	gattnaacaa	cctttttttt	cgggttaaaa	tttttaaaaa	aattngggaa	360
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<210> 662

<211> 826

<212> DNA

<213> Homo Sapiens

<400> 662

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tcattgtaaaa	atgaaagcca	agagatgtgc	cactcctgta	atcatcgatg	aaattctacc	180
ctctaagaaa	atgaaagttt	ctaacaacaa	aaagaagcca	gaggaagaag	gcagtgtctc	240
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gccttgatg	ccacctgcaa	agcagaagtt	tctaaaaagt	actgaggagc	aagagctgga	360
gaagagtatg	aaaatgcagc	aagaggtggt	ggagatgcgg	aaaaagaatg	aagaattcaa	420
gaaacttgct	ctggctggaa	tagggcaacc	tgtgaagaaa	tcagtgaagc	aggtcaccaa	480
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gaantgacta	aggggatgtt	ccattgttaa	gcctttcaac	ctgtcccngg	gaaagaanag	660
aacntttgat	gaaacagttt	ctacatatgt	gccccttgcc	cngcaagttg	aagacttccn	720
taancgaacc	ctnactgatt	tcttttgang	aaccagaang	gntgattttt	cctgttttcc	780
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<210> 663

<211> 770

<212> DNA

<213> Homo Sapiens

<400> 663

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gctgcgtggc	tgctgtgagg	ctccccatga	atccacgcag	tcttcttctc	cactgggtgca	180
gttggtgagg	ttttctaccc	tcacagcaaa	gggatcctta	actataaatt	cacggtatgc	240

anagaanagg	acagaatctg	atttactgat	tgttcctcat	ttaaaccatg	acttaatctc	300
tatcttagga	tttaactatc	tttattttct	ggtaaataat	tttaaaaaaa	gtggggagag	360
ggtgagagtc	gtaaggggca	atagcaatag	agattacact	gtgctgacac	agagactaaa	420
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atggagtcta	atcgagacat	tcatgagtn	catctcatta	ttagccttag	taatgtaaga	540
aaacnattct	caacaaaact	ggagtccaca	gttgtcaant	ntgctttctc	aggcacgggt	600
aggtnaaaat	ctgganaaat	gggttctctc	catgcccaat	gacaanacan	anggtcctag	660
gtttgaagtt	aaaaacangt	cccattgccg	gcggtatccg	cagctcacag	ctgaatttac	720
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<210> 664

<211> 593

<212> DNA

<213> Homo Sapiens

<400> 664

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aagcaacaga	atgcagagtc	tcaaggcaaa	gcgcctgagg	agcagggcct	gctaccaaat	180
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aagatgattc	cagaacggaa	acagcttgcc	atcccaaaga	cggagtctcc	agagggctac	300
tatgaagagg	ctgagccata	tgacacatcc	ctcaatgagg	acggagaggc	tgtgagcagc	360
tcctacgagt	cctacgatga	anaggacggc	agcaagggca	agtcggcccc	ttaccantgg	420
ncctcgccgg	aggccggcat	cganctgatg	cgtgacgccc	gcntctgcgc	cttcctgtgg	480
cgcaagaaag	tggctgggac	agtgggccaa	gcagctctgt	gtcatcnagg	acaacaggct	540
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<210> 665

<211> 1024

<212> DNA

<213> Homo Sapiens

<400> 665

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aaaggacaag	tatgacctct	cagaagagct	tccagcaact	gaccatggag	aaggaacagg	180
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cagaagagaa	actggacaaa	gccaatgaag	agattgctca	ggttcgaaca	aaagcaaagg	420
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gctgccaatg	caacagccct	ggaagaaaac	cctatanggn	tgcatagtct	aaaaagggag	780
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cccaaatgtg	gtttaaaatt	tgtaacnccc	cctttggggg	cttcccaaca	accggtccga	960
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<210> 666

<211> 734

<212> DNA

<213> Homo Sapiens

<400> 666

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<210> 667

<211> 592

<212> DNA

<213> Homo Sapiens

<400> 667

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acgaattttg	tttatanatc	tatgataaat	gcattctccc	tntaggaggt	agaanagtat	180
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<210> 668

<211> 373

<212> DNA

<213> Homo Sapiens

<400> 668

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<210> 669

<211> 661

<212> DNA

<213> Homo Sapiens

<400> 669

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<210> 670

<211> 401

<212> DNA

<213> Homo Sapiens

<400> 670

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caccaagggc	tgacacgcag	gtctgggcag	ctccttctgg	gaaggcctat	gacgactgcg	360
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<210> 671

<211> 1347

<212> DNA

<213> Homo Sapiens

<400> 671

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 <212> DNA
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<400> 672

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<211> 1016

<212> DNA

<213> Homo Sapiens

<400> 673

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<210> 674

<211> 1135

<212> DNA

<213> Homo Sapiens

<400> 674

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<210> 675

<211> 1067

<212> DNA

<213> Homo Sapiens

<400> 675

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<211> 784

<212> DNA

<213> Homo Sapiens

<400> 676

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<210> 677

<211> 1362

<212> DNA

<213> Homo Sapiens

<400> 677

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<210> 678

<211> 1771

<212> DNA

<213> Homo Sapiens

<400> 678

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<210> 679

<211> 1367

<212> DNA

<213> Homo Sapiens

<400> 679

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<211> 2545

<212> DNA

<213> Homo Sapiens

<400> 680

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<211> 1745

<212> DNA

<213> Homo Sapiens

<400> 681

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<212> DNA

<213> Homo Sapiens

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<212> DNA

<213> Homo Sapiens

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 <211> 803
 <212> PRT
 <213> Homo Sapiens

<400> 684

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Asn Ser Ile Arg Glu Ile Lys Glu Glu Ile Gly Asn Leu Lys Ser Ser
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His Ser Gly Val Leu Glu Ile Glu Asn Ser Val Asp Asp Leu Ser Ser
          580          585          590
Arg Met Asp Ile Leu Glu Glu Arg Ile Asp Ser Leu Glu Asp Gln Ile
          595          600          605
Glu Glu Phe Ser Lys Asp Thr Met Gln Met Thr Lys Gln Ile Ile Ser
          610          615          620
Lys Glu Gly Pro Arg Asp Ile Glu Glu Arg Ser Arg Ser Cys Asn Ile
625          630          635          640
Arg Leu Ile Gly Ile Pro Glu Lys Glu Ser Tyr Glu Asn Arg Ala Glu
          645          650          655
Asp Ile Ile Lys Glu Ile Ile Asp Glu Asn Phe Ala Glu Leu Lys Lys
          660          665          670
Gly Ser Ser Leu Glu Ile Val Ser Ala Cys Arg Val Pro Ser Lys Ile
          675          680          685
Asp Glu Lys Arg Leu Thr Pro Arg His Ile Leu Val Lys Phe Trp Asn
          690          695          700
Ser Ser Asp Lys Glu Lys Ile Ile Arg Pro Ser Arg Glu Arg Arg Glu
705          710          715          720
Ile Thr Tyr Gln Gly Thr Arg Ile Arg Leu Thr Ala Asp Leu Ser Leu
          725          730          735
Asp Thr Leu Asp Ala Arg Ser Lys Trp Ser Asn Val Phe Lys Val Leu
          740          745          750
Leu Glu Lys Gly Phe Asn Pro Arg Thr Leu Tyr Pro Ala Lys Met Ala
          755          760          765
Phe Asp Phe Arg Gly Lys Thr Lys Val Phe Leu Ser Ile Glu Glu Phe
          770          775          780
Arg Asp Tyr Val Leu His Met Pro Thr Leu Arg Glu Leu Leu Gly Asn
785          790          795          800
Asn Ile Pro

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<210> 685

<211> 947
 <212> PRT
 <213> Homo Sapiens

<400> 685

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Pro	Glu	Tyr	Ile	Asn	Thr	Lys	Lys	Asn	Gly	Arg	Leu	Thr	Asn	Gln	Leu
			20					25					30		
Gln	Tyr	Leu	Gln	Lys	Val	Val	Leu	Lys	Asp	Leu	Trp	Lys	His	Ser	Phe
			35				40					45			
Ser	Trp	Pro	Phe	Gln	Arg	Pro	Val	Asp	Ala	Val	Lys	Leu	Lys	Leu	Pro
			50			55					60				
Asp	Tyr	Tyr	Thr	Ile	Ile	Lys	Asn	Pro	Met	Asp	Leu	Asn	Thr	Ile	Lys
65					70					75					80
Lys	Arg	Leu	Glu	Asn	Lys	Tyr	Tyr	Ala	Lys	Ala	Ser	Glu	Cys	Ile	Glu
				85					90					95	
Asp	Phe	Asn	Thr	Met	Phe	Ser	Asn	Cys	Tyr	Leu	Tyr	Asn	Lys	Pro	Gly
			100					105					110		
Asp	Asp	Ile	Val	Leu	Met	Ala	Gln	Ala	Leu	Glu	Lys	Leu	Phe	Met	Gln
			115				120					125			
Lys	Leu	Ser	Gln	Met	Pro	Gln	Glu	Glu	Gln	Val	Val	Gly	Val	Lys	Glu
			130			135						140			
Arg	Ile	Lys	Lys	Gly	Thr	Gln	Gln	Asn	Ile	Ala	Val	Ser	Ser	Ala	Lys
145					150					155					160
Glu	Lys	Ser	Ser	Pro	Ser	Ala	Thr	Glu	Lys	Val	Phe	Lys	Gln	Gln	Glu
				165				170						175	
Ile	Pro	Ser	Val	Phe	Pro	Lys	Thr	Ser	Ile	Ser	Pro	Leu	Asn	Val	Val
			180					185					190		
Gln	Gly	Ala	Ser	Val	Asn	Ser	Ser	Ser	Gln	Thr	Ala	Ala	Gln	Val	Thr
			195				200					205			
Lys	Gly	Val	Lys	Arg	Lys	Ala	Asp	Thr	Thr	Thr	Pro	Ala	Thr	Ser	Ala
			210			215					220				
Val	Lys	Ala	Ser	Ser	Glu	Phe	Ser	Pro	Thr	Phe	Thr	Glu	Lys	Ser	Val
225					230					235					240
Ala	Leu	Pro	Pro	Ile	Lys	Glu	Asn	Met	Pro	Lys	Asn	Val	Leu	Pro	Asp
				245				250						255	
Ser	Gln	Gln	Gln	Tyr	Asn	Val	Val	Glu	Thr	Val	Lys	Val	Thr	Glu	Gln
			260					265					270		
Leu	Arg	His	Cys	Ser	Glu	Ile	Leu	Lys	Glu	Met	Leu	Ala	Lys	Lys	His
			275				280					285			
Phe	Ser	Tyr	Ala	Trp	Pro	Phe	Tyr	Asn	Pro	Val	Asp	Val	Asn	Ala	Leu
			290			295					300				
Gly	Leu	His	Asn	Tyr	Tyr	Asp	Val	Val	Lys	Asn	Pro	Met	Asp	Leu	Gly
305					310					315					320
Thr	Ile	Lys	Glu	Lys	Met	Asp	Asn	Gln	Glu	Tyr	Lys	Asp	Ala	Tyr	Ser
				325					330					335	
Phe	Ala	Ala	Asp	Val	Arg	Leu	Met	Phe	Met	Asn	Cys	Tyr	Lys	Tyr	Asn
			340					345					350		
Pro	Pro	Asp	His	Glu	Val	Val	Thr	Met	Ala	Arg	Met	Leu	Gln	Asp	Val
			355				360					365			
Phe	Glu	Thr	His	Phe	Ser	Lys	Ile	Pro	Ile	Glu	Pro	Val	Glu	Ser	Met
			370			375					380				
Pro	Leu	Cys	Tyr	Ile	Lys	Thr	Asp	Ile	Thr	Glu	Thr	Thr	Gly	Arg	Glu
385					390					395					400

Asn Thr Asn Glu Ala Ser Ser Glu Gly Asn Ser Ser Asp Asp Ser Glu
 405 410 415
 Asp Glu Arg Val Lys Arg Leu Ala Lys Leu Gln Glu Gln Leu Lys Ala
 420 425 430
 Val His Gln Gln Leu Gln Val Leu Ser Gln Val Pro Phe Arg Lys Leu
 435 440 445
 Asn Lys Lys Lys Glu Lys Ser Lys Lys Glu Lys Lys Lys Glu Lys Val
 450 455 460
 Asn Asn Ser Asn Glu Asn Pro Arg Lys Met Cys Glu Gln Met Arg Leu
 465 470 475 480
 Lys Glu Lys Ser Lys Arg Asn Gln Pro Lys Lys Arg Lys Gln Gln Phe
 485 490 495
 Ile Gly Leu Lys Ser Glu Asp Glu Asp Asn Ala Lys Pro Met Asn Tyr
 500 505 510
 Asp Glu Lys Arg Gln Leu Ser Leu Asn Ile Asn Lys Leu Pro Gly Asp
 515 520 525
 Lys Leu Gly Arg Val Val His Ile Ile Gln Ser Arg Glu Pro Ser Leu
 530 535 540
 Ser Asn Ser Asn Pro Asp Glu Ile Glu Ile Asp Phe Glu Thr Leu Lys
 545 550 555 560
 Ala Ser Thr Leu Arg Glu Leu Glu Lys Tyr Val Ser Ala Cys Leu Arg
 565 570 575
 Lys Arg Pro Leu Lys Pro Pro Ala Lys Lys Ile Met Met Ser Lys Glu
 580 585 590
 Glu Leu His Ser Gln Lys Lys Gln Glu Leu Glu Lys Arg Leu Leu Asp
 595 600 605
 Val Asn Asn Gln Leu Asn Ser Arg Lys Arg Gln Thr Lys Ser Asp Lys
 610 615 620
 Thr Gln Pro Ser Lys Ala Val Glu Asn Val Ser Arg Leu Ser Glu Ser
 625 630 635 640
 Ser Ser Ser Ser Ser Ser Ser Ser Glu Ser Glu Ser Ser Ser Ser Asp
 645 650 655
 Leu Ser Ser Ser Asp Ser Ser Asp Ser Glu Ser Glu Met Phe Pro Lys
 660 665 670
 Phe Thr Glu Val Lys Pro Asn Asp Ser Pro Ser Lys Glu His Val Lys
 675 680 685
 Lys Met Lys Asn Glu Cys Ile Leu Pro Glu Gly Arg Thr Gly Val Thr
 690 695 700
 Gln Ile Gly Tyr Cys Val Gln Asp Thr Thr Ser Ala Asn Thr Thr Leu
 705 710 715 720
 Val His Gln Thr Thr Pro Ser His Val Met Pro Pro Asn His His Gln
 725 730 735
 Leu Ala Phe Asn Tyr Gln Glu Leu Glu His Leu Gln Thr Val Lys Asn
 740 745 750
 Ile Ser Pro Leu Gln Ile Leu Pro Pro Ser Gly Asp Ser Glu Gln Leu
 755 760 765
 Ser Asn Gly Ile Thr Val Met His Pro Ser Gly Asp Ser Asp Thr Thr
 770 775 780
 Met Leu Glu Ser Glu Cys Gln Ala Pro Val Gln Lys Asp Ile Lys Ile
 785 790 795 800
 Lys Asn Ala Asp Ser Trp Lys Ser Leu Gly Lys Pro Val Lys Pro Ser
 805 810 815
 Gly Val Met Lys Ser Ser Asp Glu Leu Phe Asn Gln Phe Arg Lys Ala
 820 825 830
 Ala Ile Glu Lys Glu Val Lys Ala Arg Thr Gln Glu Leu Ile Arg Lys

835						840						845					
His	Leu	Glu	Gln	Asn	Thr	Lys	Glu	Leu	Lys	Ala	Ser	Gln	Glu	Asn	Gln		
850						855						860					
Arg	Asp	Leu	Gly	Asn	Gly	Leu	Thr	Val	Glu	Ser	Phe	Ser	Asn	Lys	Ile		
865						870						875					
Gln	Asn	Lys	Cys	Ser	Gly	Glu	Glu	Gln	Lys	Glu	His	Pro	Gln	Ser	Ser		
885						890						895					
Glu	Ala	Gln	Asp	Lys	Ser	Lys	Leu	Trp	Leu	Leu	Lys	Asp	Arg	Asp	Leu		
900						905						910					
Ala	Arg	Pro	Lys	Glu	Gln	Glu	Arg	Arg	Arg	Arg	Glu	Ala	Met	Val	Gly		
915						920						925					
Thr	Ile	Asp	Met	Thr	Leu	Gln	Ser	Asp	Ile	Met	Thr	Met	Phe	Glu	Asn		
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Asn	Phe	Asp															
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<210> 686
<211> 3106
<212> DNA
<213> Homo Sapiens
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<400> 686						
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aaaatgcata	tggtaaaatg	attgcttttca	gataacaaga	taccaatctt	atattgtatt	3060
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<210> 687

<211> 1759

<212> DNA

<213> Homo Sapiens

<400> 687

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1759

<210> 688

<211> 207

<212> PRT

<213> Homo Sapiens

<400> 688

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 Ile Ser Ala Ser Arg Lys Val Pro Asn Leu Ser Val Ser Lys Leu Ile
 35 40 45
 Thr Glu Ala Leu Ser Val Ser Gln Glu Arg Val Gly Met Ser Leu Val
 50 55 60
 Ala Leu Lys Lys Ala Leu Ala Ala Ala Gly Tyr Asp Val Glu Lys Asn
 65 70 75 80
 Asn Ser Arg Ile Lys Leu Ser Leu Lys Ser Leu Val Asn Lys Gly Ile
 85 90 95
 Leu Val Gln Thr Arg Gly Thr Gly Ala Ser Gly Ser Phe Lys Leu Ser
 100 105 110
 Lys Lys Val Ile Pro Lys Ser Thr Arg Ser Lys Ala Lys Lys Ser Val
 115 120 125
 Ser Ala Lys Thr Lys Lys Leu Val Leu Ser Arg Asp Ser Lys Ser Pro
 130 135 140
 Lys Thr Ala Lys Thr Asn Lys Arg Ala Lys Lys Pro Arg Ala Thr Thr
 145 150 155 160
 Pro Lys Thr Val Arg Ser Gly Arg Lys Ala Lys Gly Ala Lys Gly Lys
 165 170 175
 Gln Gln Gln Lys Ser Pro Val Lys Ala Arg Ala Ser Lys Ser Lys Leu
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<210> 689

<211> 1464

<212> DNA

<213> Homo Sapiens

<400> 689

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 aaggaagaat ttctcttgaa gcaccggaac ttgctactac cagcaccatg ccctaccaat 180
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<210> 690

<211> 363

<212> PRT

<213> Homo Sapiens

<400> 690

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20      25      30
Asp Glu Ser Thr Gly Ser Ile Ala Lys Arg Leu Gln Ser Ile Gly Thr
35      40      45
Glu Asn Thr Glu Glu Asn Arg Arg Phe Tyr Arg Gln Leu Leu Leu Thr
50      55      60
Ala Asp Asp Arg Val Asn Pro Cys Ile Gly Gly Val Ile Leu Phe His
65      70      75      80
Glu Thr Leu Tyr Gln Lys Ala Asp Asp Gly Arg Pro Phe Pro Gln Val
85      90      95
Ile Lys Ser Lys Gly Gly Val Val Gly Ile Lys Val Asp Lys Gly Val
100     105     110
Val Pro Leu Ala Gly Thr Asn Gly Glu Thr Thr Thr Gln Gly Leu Asp
115     120     125
Gly Leu Ser Glu Arg Cys Ala Gln Tyr Lys Lys Asp Gly Ala Asp Phe
130     135     140
Ala Lys Trp Arg Cys Val Leu Lys Ile Gly Glu His Thr Pro Ser Ala
145     150     155     160
Leu Ala Ile Met Glu Asn Ala Asn Val Leu Ala Arg Tyr Ala Ser Ile
165     170     175
Cys Gln Gln Asn Gly Ile Val Pro Ile Val Glu Pro Glu Ile Leu Pro
180     185     190
Asp Gly Asp His Asp Leu Lys Arg Cys Gln Tyr Val Thr Glu Lys Val
195     200     205
Leu Ala Ala Val Tyr Lys Ala Leu Ser Asp His His Ile Tyr Leu Glu
210     215     220
Gly Thr Leu Leu Lys Pro Asn Met Val Thr Pro Gly His Ala Cys Thr
225     230     235     240
Gln Lys Phe Ser His Glu Glu Ile Ala Met Ala Thr Val Thr Ala Leu
245     250     255
Arg Arg Thr Val Pro Pro Ala Val Thr Gly Ile Thr Phe Leu Ser Gly
260     265     270
Gly Gln Ser Glu Glu Glu Ala Ser Ile Asn Leu Asn Ala Ile Asn Lys
275     280     285
Cys Pro Leu Leu Lys Pro Trp Ala Leu Thr Phe Ser Tyr Gly Arg Ala

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290	295	300
Leu Gln Ala Ser Ala	Leu Lys Ala Trp Gly Gly	Lys Lys Glu Asn Leu
305	310	315
Lys Ala Ala Gln Glu	Glu Tyr Val Lys Arg Ala	Leu Ala Asn Ser Leu
325	330	335
Ala Cys Gln Gly Lys Tyr Thr Pro Ser Gly Gln	Ala Gly Ala Ala Ala	
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Ser Glu Ser Leu Phe Val Ser Asn His Ala Tyr		
355	360	

<210> 691
 <211> 1216
 <212> DNA
 <213> Homo Sapiens

<400> 691

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ctggcagtc	agctctccaa	ggggcgtag	agtgttctga	tcattctccac	agaccagca	180
cacaacatct	cagatgcttt	tgaccagaag	ttctcaaagg	tgctaccac	gggtcaaaggc	240
tatgacaacc	tctttgctat	ggagattgac	cccagcctgg	gcgtggcgga	cgtgcctgac	300
gagttcttcg	aggaggacaa	catgctgagc	atgggcaaga	agatgatgca	ggaggccatg	360
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ggcatgaact	tctcggtggt	ggtatttgac	acggcaccca	cgggccacac	cctgaggctg	480
ctcaacttcc	ccaccatcgt	ggagcggggc	ctgggcccgc	ttatgcagat	caagaaccag	540
atcagccctt	tcattctcaca	gatgtgcaac	atgctggggc	tgggggacat	gaacgcagac	600
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ctcctccttg	agccctacaa	gccccccagt	gcccagtagc	acagctgcc	gccccaacccg	1020
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tcccccccat	aatacagggg	gagccacttg	ggcaggaggc	agggaggggg	ccattcccc	1140
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<210> 692
 <211> 1958
 <212> DNA
 <213> Homo Sapiens

<400> 692

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tcccgccac	gtccatttc	gcccctcgcg	tccggagtcc	ccgtggccag	atctaaccat	180
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cgtggccacc	tatgcggggc	agttcaacca	ggactatctc	tcgggaatgg	cggccaacat	360
gtctgggaca	tttggaggag	ccaacatgcc	caacctgtac	cctggggccc	ctggggctgg	420
ctaccaccca	gtgccccctg	gcggctttgg	gcagcccccc	tctgcccagc	agcctgttcc	480
tccctatggg	atgtatccac	cccaggagg	aaacccaccc	tccaggatgc	cctcatatcc	540
gccataccca	ggggccccctg	tgccgggcca	gcccattgcca	ccccccggac	agcagcccc	600
aggggcctac	cctgggcagc	caccagtgc	ctaccctggt	cagcctccag	tgccactccc	660


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tgggcagcag cagccagtgc cgagctaccc aggatacccg gggctctggga ctgtcacccc 720
cgctgtgccc ccaacccagt ttggaagccg aggcaccatc actgatgctc ccggctttga 780
ccccctgcga gatgccgagg tccctgcggaa ggccatgaaa ggcttcggga cggatgagca 840
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gacctgggtc ggtctagaac tctctcagga tgccttttct accccatccc tcacagcctc 1920
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<210> 693

<211> 505

<212> PRT

<213> Homo Sapiens

<400> 693

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20          25          30
Ser Met Pro Pro Ile Gly Leu Asp Asn Val Ala Thr Tyr Ala Gly Gln
35          40          45
Phe Asn Gln Asp Tyr Leu Ser Gly Met Ala Ala Asn Met Ser Gly Thr
50          55          60
Phe Gly Gly Ala Asn Met Pro Asn Leu Tyr Pro Gly Ala Pro Gly Ala
65          70          75          80
Gly Tyr Pro Pro Val Pro Pro Gly Gly Phe Gly Gln Pro Pro Ser Ala
85          90          95
Gln Gln Pro Val Pro Pro Tyr Gly Met Tyr Pro Pro Pro Gly Gly Asn
100         105         110
Pro Pro Ser Arg Met Pro Ser Tyr Pro Pro Tyr Pro Gly Ala Pro Val
115         120         125
Pro Gly Gln Pro Met Pro Pro Pro Gly Gln Gln Pro Pro Gly Ala Tyr
130         135         140
Pro Gly Gln Pro Pro Val Thr Tyr Pro Gly Gln Pro Pro Val Pro Leu
145         150         155         160
Pro Gly Gln Gln Gln Pro Val Pro Ser Tyr Pro Gly Tyr Pro Gly Ser
165         170         175
Gly Thr Val Thr Pro Ala Val Pro Pro Thr Gln Phe Gly Ser Arg Gly
180         185         190
Thr Ile Thr Asp Ala Pro Gly Phe Asp Pro Leu Arg Asp Ala Glu Val
195         200         205

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Leu Arg Lys Ala Met Lys Gly Phe Gly Thr Asp Glu Gln Ala Ile Ile
 210 215 220
 Asp Cys Leu Gly Ser Arg Ser Asn Lys Gln Arg Gln Gln Ile Leu Leu
 225 230 235 240
 Ser Phe Lys Thr Ala Tyr Gly Lys Asp Leu Ile Lys Asp Leu Lys Ser
 245 250 255
 Glu Leu Ser Gly Asn Phe Glu Lys Thr Ile Leu Ala Leu Met Lys Thr
 260 265 270
 Pro Val Leu Phe Asp Ile Tyr Glu Ile Lys Glu Ala Ile Lys Gly Val
 275 280 285
 Gly Thr Asp Glu Ala Cys Leu Ile Glu Ile Leu Ala Ser Arg Ser Asn
 290 295 300
 Glu His Ile Arg Glu Leu Asn Arg Ala Tyr Lys Ala Glu Phe Lys Lys
 305 310 315 320
 Thr Leu Glu Glu Ala Ile Arg Ser Asp Thr Ser Gly His Phe Gln Arg
 325 330 335
 Leu Leu Ile Ser Leu Ser Gln Gly Asn Arg Asp Glu Ser Thr Asn Val
 340 345 350
 Asp Met Ser Leu Ala Gln Arg Asp Ala Gln Glu Leu Tyr Ala Ala Gly
 355 360 365
 Glu Asn Arg Leu Gly Thr Asp Glu Ser Lys Phe Asn Ala Val Leu Cys
 370 375 380
 Ser Arg Ser Arg Ala His Leu Val Ala Val Phe Asn Glu Tyr Gln Arg
 385 390 395 400
 Met Thr Gly Arg Asp Ile Glu Lys Ser Ile Cys Arg Glu Met Ser Gly
 405 410 415
 Asp Leu Glu Glu Gly Met Leu Ala Val Val Lys Cys Leu Lys Asn Thr
 420 425 430
 Pro Ala Phe Phe Ala Glu Arg Leu Asn Lys Ala Met Arg Gly Ala Gly
 435 440 445
 Thr Lys Asp Arg Thr Leu Ile Arg Ile Met Val Ser Arg Ser Glu Thr
 450 455 460
 Asp Leu Leu Asp Ile Arg Ser Glu Tyr Lys Arg Met Tyr Gly Lys Ser
 465 470 475 480
 Leu Tyr His Asp Ile Ser Gly Asp Thr Ser Gly Asp Tyr Arg Lys Ile
 485 490 495
 Leu Leu Lys Ile Cys Gly Gly Asn Asp
 500 505

<210> 694

<211> 1141

<212> DNA

<213> Homo Sapiens

<400> 694

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cctgatgggt	ggaaggaacc	agctttttcc	aaagaggaca	atcccagagg	acttttggag	180
gagagcagtt	tcgcaacttt	gttcccaaaa	tacaggggaag	cttacttgaa	agagtgttgg	240
ccattggtgc	agaaagcctt	aaatgaacat	catgttaatg	caaccctgga	cctgatcgaa	300
ggcagcatga	ctgtttgtac	tacaaagaag	acttttgatc	catatatcat	cattagggcc	360
agagatctga	taaaactgtt	agcaaggagt	gtttcatttg	aacaggcagt	acgaattctt	420
caggatgatg	ttgcatgtga	catcattaaa	ataggttctt	tagtaaggaa	taaagagaga	480
tttgtaaaac	gaagacaacg	gcttattggt	cccaaaggat	ctacattgaa	ggcattggaa	540
ctcttaacta	attgttacat	tatggttcag	ggaaacacag	tttcagccat	tggacctttt	600

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agtggcttaa aagagggttag aaaagtagtc cttgatacta tgaagaatat tcatccaatt 660
tataacatta aaagcttaat gattaagaga gagttggcaa aagattctga attacgatca 720
caaagttggg agagattttt gccacagttc aaacacaaaa atgtgaataa acgcaaggaa 780
ccaaagaaaa aaactgttaa gaaagatata cgccattccc accaccacaa ccagaaagtc 840
agatcgataa agaattggct agtgggtgaat actttttgaa ggcaaatacag aagaagcggc 900
agaaaaatgaa gcaataaagg ctaaacaagc agaagccatc agtaagagac aagaggaaag 960
aaacaaagca tttattccac ctaaggaaaa accaattgtg aaacctaagg aagcttctac 1020
tgaaactaaa attgatgtgg ccagcatcaa ggaaaagggtt aagaaagcaa agaataagaa 1080
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a 1141

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<210> 695

<211> 288

<212> PRT

<213> Homo Sapiens

<400> 695

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Glu Phe Arg Asn Gln Lys Pro Lys Pro Glu Asn Gln Asp Glu Ser Glu
20     25     30
Leu Leu Thr Val Pro Asp Gly Trp Lys Glu Pro Ala Phe Ser Lys Glu
35     40     45
Asp Asn Pro Arg Gly Leu Leu Glu Glu Ser Ser Phe Ala Thr Leu Phe
50     55     60
Pro Lys Tyr Arg Glu Ala Tyr Leu Lys Glu Cys Trp Pro Leu Val Gln
65     70     75     80
Lys Ala Leu Asn Glu His His Val Asn Ala Thr Leu Asp Leu Ile Glu
85     90     95
Gly Ser Met Thr Val Cys Thr Thr Lys Lys Thr Phe Asp Pro Tyr Ile
100    105    110
Ile Ile Arg Ala Arg Asp Leu Ile Lys Leu Leu Ala Arg Ser Val Ser
115    120    125
Phe Glu Gln Ala Val Arg Ile Leu Gln Asp Asp Val Ala Cys Asp Ile
130    135    140
Ile Lys Ile Gly Ser Leu Val Arg Asn Lys Glu Arg Phe Val Lys Arg
145    150    155    160
Arg Gln Arg Leu Ile Gly Pro Lys Gly Ser Thr Leu Lys Ala Leu Glu
165    170    175
Leu Leu Thr Asn Cys Tyr Ile Met Val Gln Gly Asn Thr Val Ser Ala
180    185    190
Ile Gly Pro Phe Ser Gly Leu Lys Glu Val Arg Lys Val Val Leu Asp
195    200    205
Thr Met Lys Asn Ile His Pro Ile Tyr Asn Ile Lys Ser Leu Met Ile
210    215    220
Lys Arg Glu Leu Ala Lys Asp Ser Glu Leu Arg Ser Gln Ser Trp Glu
225    230    235    240
Arg Phe Leu Pro Gln Phe Lys His Lys Asn Val Asn Lys Arg Lys Glu
245    250    255
Pro Lys Lys Lys Thr Val Lys Lys Asp Ile Arg His Ser His His His
260    265    270
Asn Gln Lys Val Arg Ser Ile Lys Asn Trp Leu Val Val Asn Thr Phe
275    280    285

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<210> 696

<211> 1008
 <212> DNA
 <213> Homo Sapiens

<400> 696

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aacgtggcag aggaaaagcc caagttaaag caacaaatga atccgaagac gaaatcccac      180
agctggtagc aataggaaaag aagactccag ctaatgaaaa agtagagatt caaaaacatg      240
ccacagggaa gaagtctcca gcaaagagtc ctaatcccag cacacctcgt gggaagaaaa      300
agaaaggctt tgccagcatc tgagacccca aaagctgcag agtctgagac cccagggaaa      360
agcccagaga agaagcctaa aatcaaagaa gaggcagtga aggaaaaaag tccttcgctg      420
gggaaaaaag atgcgagaca gactcccaaa aaagccagag gccaaagtttt tcaccattcc      480
tagtaaatct gtgagaaaag cttcccacac ccccaaaaaa tggcccaaaa aacccaaagt      540
accccagtcg acctaaagtc agtgattcaa ctggaaggaa acctcaatgc tgcctccaga      600
gcttttttga aatactcaga tcctggccgc ctttgtaacc ttctctaaac gtcaggcctg      660
gacttaaaag atttttttaa acctccataa gtagtccagg ggcggtggct cagcctgta      720
atcccagcac tttgggaggc cgaggcaggc ggatcacaag gtcaacgaga tcgagaccat      780
cctggccaac atggtgaaac cctgtctgta ccaaaaatac aaaaattaat tgggcatggg      840
ggtggacacc tgaatccca gctactaggg aggctgaggc aggagaattg cttgaacctg      900
ggaggcggag gttgcagtga gccactgcac tccagcctga tgacagagca agactcagtc      960
tcaaaaataa ataaaaataa taaaacctcc ataagtaatc ctgaaaaa      1008
  
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<210> 697
 <211> 685
 <212> DNA
 <213> Homo Sapiens

<400> 697

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aaaaanaaaa aagaaaaaag anaatgccca gcgcggtggc taatgcctgt aaccctagtg      120
agacagccaa gtaaaaaagg ctccaagac aatctacaag cactgggagg atgggggtgca      180
gcacaaaaat gttcacacca tttgcagagg ggaacagcct ggcccctgct gttccaggat      240
agtaaccagg aattcagttg gtgagatgga cagcctgtta gcaggactcc atctcacttt      300
gctgtgttgt tctttttccc ttttgcccaa taaattngta acccctcacc tttcaaagtg      360
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cactttggga ggcgaagatg ggctgattgc ttgagctcag gggtttaaga acagcctggg      480
caacatagtg aaaccctagt ttttaccaaa aatacgaaaa ttaaccaggc atgacctgtta      540
tcccagctga ggcacaagaa tccctgaac ccaggaggcn gaanncta tnnnaaccga      600
aaatttgenc cactggccc ccccaggcgg aagctagtga gccgagattg cgccactgca      660
cccctgagac gctgtntcaa aaaaaa      685
  
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<210> 698
 <211> 1205
 <212> DNA
 <213> Homo Sapiens

<400> 698

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ggatgtgctt ttacatggaa ctctgacca aaaacgaaaa ctcatcagag aatgtcttac      180
cggagaaagt gaatcatcta gtgaagatga atttgaaaag gagatggaag ctgaattaaa      240
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aaatggaaaa gttgcaacag ctccgacaag gtactacgat gatatatatt ttgattctga      360
ttccgaggat gaagacagag cagtacaggt gaccaagaaa aaaaagaaga aacaacacaa      420
  
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gattccaaca	aatgacgaat	tactgtntga	tcctgaaaaa	gataacagag	atcaggcctg	480
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ccccttattg	atgggactga	tattcattct	gtttttgatg	aacatttgga	aactgtcggg	1140
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aaaaa						1205

<210> 699

<211> 1427

<212> DNA

<213> Homo Sapiens

<400> 699

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cattgatgtc	ctgagtgtag	cagtcaagaa	acgtgtcttg	tgtttaccta	gggatgaaaa	300
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agaagcaaga	tttctttcc	tggatgaaaa	tgttgtctcc	tttctaaatt	ctctgccgat	1080
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ttcacaatgt	aacaatataa	aaataagttt	ttatataatt	atataaaagt	aagatactct	1380
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<210> 700

<211> 1967

<212> DNA

<213> Homo Sapiens

<400> 700

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cagacttcaa	tataaaaaaa	aagtaaatcc	agatttgcaa	gtagaagtaa	agcctagtat	180

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 aggctcagaa tccagaaccc ttgatgtgtc cacagatgaa gaggataaaa tacatcactc 1260
 ctcaaaaagt aaggatgatc agggtttgtc ttctgacagt tctagctctc ttggagaaaa 1320
 agaactttca tcaacagtta agatcccaga tgcagctttt attcaggcag ccgcgagaaa 1380
 acgttgaatt ggccagggcc caagatgact atatttcttt ggatgtacaa catacctcct 1440
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<211> 1106

<212> DNA

<213> Homo Sapiens

<400> 702

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<210> 703

<211> 1095

<212> DNA

<213> Homo Sapiens

<400> 703

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<210> 704

<211> 1968

<212> DNA

<213> Homo Sapiens

<400> 704

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<211> 800

<212> DNA

<213> Homo Sapiens

<400> 705

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<210> 706

<211> 487

<212> DNA

<213> Homo Sapiens

<400> 706

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<211> 3599

<212> DNA

<213> Homo Sapiens

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<210> 708

<211> 1123

<212> PRT

<213> Homo Sapiens

<400> 708

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Gly Arg Asp Ser Leu Pro Phe Asp Phe Gln Gly His Ser Gly Pro Pro
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Phe Ala Asn Val Glu Glu His Ser Phe Ser Tyr Gly Ala Arg Asp Gly
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<210> 802

<211> 429

<212> PRT

<213> Homo Sapiens

<400> 802

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 Thr Gln Phe Asp Val Lys Asn Asp Arg Tyr Ile Val Asn Gly Ser His
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 Val Leu Cys Pro Glu Cys Glu Asn Pro Glu Thr Asp Leu His Val Asn
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 Pro Lys Lys Gln Thr Ile Gly Asn Ser Cys Lys Ala Cys Gly Tyr Arg
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 Gly Met Leu Asp Thr His His Lys Leu Cys Thr Phe Ile Leu Lys Asn
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 Pro Pro Glu Asn Ser Asp Ile Gly Thr Gly Lys Lys Glu Lys Glu Lys
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 Lys Asn Arg Lys Gly Lys Asp Lys Glu Asn Gly Ser Val Ser Thr Ser

165 170 175
 Glu Thr Pro Pro Pro Pro Pro Pro Asn Glu Ile Ser Pro Pro His Ala
 180 185 190
 Val Glu Glu Glu Glu Asp Asp Asp Trp Gly Glu Asp Thr Thr Glu Glu
 195 200 205
 Ala Gln Arg Arg Arg Met Asp Glu Ile Ser Asp His Ala Lys Gly Leu
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 Thr Leu Ser Asp Asp Leu Glu Arg Thr Val Glu Glu Arg Val Asn Ile
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 Asn Lys Lys Ala Gln Arg Tyr Leu Leu His Gly Leu Glu Cys Val Val
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 Ala Met His Gln Ala Gln Leu Ile Ser Lys Ile Pro His Ile Leu Lys
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<210> 803

<211> 2251

<212> DNA

<213> Homo Sapiens

<400> 803

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<210> 804

<211> 609

<212> PRT

<213> Homo Sapiens

<400> 804

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Ile Ala Phe Ala Gln Tyr Leu Gln Gln Cys Pro Phe Glu Asp His Val
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Lys Leu Val Asn Glu Val Thr Glu Phe Ala Lys Thr Cys Val Ala Asp
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Glu Ser Ala Glu Asn Cys Asp Lys Ser Leu His Thr Leu Phe Gly Asp
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Asp Cys Cys Ala Lys Gln Glu Pro Glu Arg Asn Glu Cys Phe Leu Gln
115 120 125
His Lys Asp Asp Asn Pro Asn Leu Pro Arg Leu Val Arg Pro Glu Val
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Asp Val Met Cys Thr Ala Phe His Asp Asn Glu Glu Thr Phe Leu Lys
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Lys Tyr Leu Tyr Glu Ile Ala Arg Arg His Pro Tyr Phe Tyr Ala Pro
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Cys Gln Ala Ala Asp Lys Ala Ala Cys Leu Leu Pro Lys Leu Asp Glu

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<210> 805

<211> 1356
 <212> DNA
 <213> Homo Sapiens

<400> 805

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<210> 806
 <211> 299
 <212> PRT
 <213> Homo Sapiens

<400> 806

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Lys	Lys	Asn	Asn	Arg	Phe	Asn	Asp	Gly	Lys	Val	Asp	Pro	Ala	Gly	Arg
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<212> DNA
<213> Homo Sapiens
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<212> PRT
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 420 425 430
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 545 550 555 560
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 565 570 575
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 580 585 590
 Ala Lys Leu Thr Leu Ser Val Pro Thr Glu Lys Phe Glu Ser Met Lys
 595 600 605
 Ser Leu Leu Ser Ser Glu Val Asn Glu Lys Val Lys Lys Ile Gly Glu
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<210> 809

<211> 1725

<212> DNA

<213> Homo Sapiens

<400> 809

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<210> 810

<211> 355

<212> PRT

<213> Homo Sapiens

<400> 810

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 20          25          30
Val Asn Gly Thr Val Leu Ser Ser Ser Gly Thr Arg Phe Ala Val Asn
 35          40          45
Phe Gln Thr Gly Phe Ser Gly Asn Asp Ile Ala Phe His Phe Asn Pro
 50          55          60
Arg Phe Glu Asp Gly Gly Tyr Val Val Cys Asn Thr Arg Gln Asn Gly
 65          70          75          80
Ser Trp Gly Pro Glu Arg Lys Thr His Met Pro Phe Gln Lys Gly
 85          90          95
Met Pro Phe Asp Leu Cys Phe Leu Val Gln Ser Ser Asp Phe Lys Val
 100         105         110
Met Val Asn Gly Ile Leu Phe Val Gln Tyr Phe His Arg Val Pro Phe
 115         120         125
His Arg Val Asp Thr Ile Ser Val Asn Gly Ser Val Gln Leu Ser Tyr
 130         135         140
Ile Ser Phe Gln Asn Pro Arg Thr Val Pro Val Gln Pro Ala Phe Ser
 145         150         155         160
Thr Val Pro Phe Ser Gln Pro Val Cys Phe Pro Pro Arg Pro Arg Gly
 165         170         175
Arg Arg Gln Lys Pro Pro Gly Val Trp Pro Ala Asn Pro Ala Pro Ile
 180         185         190
Thr Gln Thr Val Ile His Thr Val Gln Ser Ala Pro Gly Gln Met Phe
 195         200         205
Ser Thr Pro Ala Ile Pro Pro Met Met Tyr Pro His Pro Ala Tyr Pro
 210         215         220

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Met Pro Phe Ile Thr Thr Ile Leu Gly Gly Leu Tyr Pro Ser Lys Ser
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 245 250 255
 Asn Leu Cys Ser Gly Asn His Ile Ala Phe His Leu Asn Pro Arg Phe
 260 265 270
 Asp Glu Asn Ala Val Val Arg Asn Thr Gln Ile Asp Asn Ser Trp Gly
 275 280 285
 Ser Glu Glu Arg Ser Leu Pro Arg Lys Met Pro Phe Val Arg Gly Gln
 290 295 300
 Ser Phe Ser Val Trp Ile Leu Cys Glu Ala His Cys Leu Lys Val Ala
 305 310 315 320
 Val Asp Gly Gln His Leu Phe Glu Tyr Tyr His Arg Leu Arg Asn Leu
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 <211> 1022
 <212> DNA
 <213> Homo Sapiens

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 <211> 317
 <212> PRT
 <213> Homo Sapiens

<400> 812
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35 40 45
 Gly Thr Leu Glu Lys Val Pro Ala Ala Glu Ser Ala Asp Pro Pro Gln
 50 55 60
 Ser Pro Gln Gly Ala Ser Ala Leu Pro Thr Thr Ile Ser Phe Thr Cys
 65 70 75 80
 Trp Arg Gln Pro Asn Glu Gly Ser Ser Ser Gln Glu Glu Glu Glu Ala
 85 90 95
 Ser Thr Ser Pro Asp Ala Glu Ser Leu Phe Arg Glu Ala Leu Ser Asn
 100 105 110
 Lys Val Asp Glu Leu Ala His Phe Leu Leu Arg Lys Tyr Arg Ala Lys
 115 120 125
 Glu Leu Val Thr Lys Ala Glu Met Leu Glu Arg Val Ile Lys Asn Tyr
 130 135 140
 Lys Arg Cys Phe Pro Val Ile Phe Gly Lys Ala Ser Glu Ser Leu Lys
 145 150 155 160
 Met Ile Phe Gly Ile Asp Val Lys Glu Val Asp Pro Ala Ser Asn Thr
 165 170 175
 Tyr Thr Leu Val Thr Cys Leu Gly Leu Ser Tyr Asp Gly Leu Leu Gly
 180 185 190
 Asn Asn Gln Ile Phe Pro Lys Thr Gly Leu Leu Ile Ile Val Leu Gly
 195 200 205
 Thr Ile Ala Met Glu Gly Asp Ser Ala Ser Glu Glu Glu Ile Trp Glu
 210 215 220
 Glu Leu Gly Val Met Gly Val Tyr Asp Gly Arg Glu His Thr Val Tyr
 225 230 235 240
 Gly Glu Pro Arg Lys Leu Leu Thr Gln Asp Trp Val Gln Glu Asn Tyr
 245 250 255
 Leu Glu Tyr Arg Gln Val Pro Gly Ser Asn Pro Ala Arg Tyr Glu Phe
 260 265 270
 Leu Trp Gly Pro Arg Ala Leu Ala Glu Thr Ser Tyr Val Lys Val Leu
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<210> 813

<211> 5175

<212> DNA

<213> Homo Sapiens

<400> 813

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<210> 814
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 <212> PRT.
 <213> Homo Sapiens

<400> 814

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          35          40          45
Glu Thr Gln Glu Glu Phe Val Asp Asp Phe Arg Val Gly Glu Arg Val
          50          55          60
Trp Val Asn Gly Asn Lys Pro Gly Phe Ile Gln Phe Leu Gly Glu Thr
65          70          75          80
Gln Phe Ala Pro Gly Gln Trp Ala Gly Ile Val Leu Asp Glu Pro Ile
          85          90          95
Gly Lys Asn Asp Gly Ser Val Ala Gly Val Arg Tyr Phe Gln Cys Glu
          100          105          110
Pro Leu Lys Gly Ile Phe Thr Arg Pro Ser Lys Leu Thr Arg Lys Val
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Gln Ala Glu Asp Glu Ala Asn Gly Leu Gln Thr Thr Pro Ala Ser Arg
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Ala Thr Ser Pro Leu Cys Thr Ser Thr Ala Ser Met Val Ser Ser Ser
145          150          155          160
Pro Ser Thr Pro Ser Asn Ile Pro Gln Lys Pro Ser Gln Pro Ala Ala
          165          170          175
Lys Glu Pro Ser Ala Thr Pro Pro Ile Ser Asn Leu Thr Lys Thr Ala
          180          185          190
Ser Glu Ser Ile Ser Asn Leu Ser Glu Ala Gly Ser Ile Lys Lys Gly
          195          200          205
Glu Arg Glu Leu Lys Ile Gly Asp Arg Val Leu Val Gly Gly Thr Lys

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 Ala Gly Val Val Arg Phe Leu Gly Glu Thr Asp Phe Ala Lys Gly Glu
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 Val Ala Gly Thr Arg Tyr Phe Gln Cys Gln Pro Lys Tyr Gly Leu Phe
 260 265 270
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 Ala Lys Ala Lys Ala Asn Ala Val Arg Arg Val Met Ala Thr Thr Ser
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 385 390 395 400
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 405 410 415
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 Glu Glu Lys Arg Lys Val Glu Asp Leu Gln Phe Arg Val Glu Glu Glu
 435 440 445
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 450 455 460
 Arg Ile Met Glu Leu Glu Lys Asp Leu Ala Leu Arg Val Gln Glu Val
 465 470 475 480
 Ala Glu Leu Arg Arg Arg Leu Glu Ser Asn Lys Pro Ala Gly Asp Val
 485 490 495
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 675 680 685
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 Leu Gln Lys Ser Ile Glu Asp Met Thr Val Lys Ala Glu Gln Ser Gln
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 Val Lys Tyr Met Asn Ser Gly Pro Val Val Ala Met Val Trp Glu Gly
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 Ala Asp Ser Lys Pro Gly Thr Ile Arg Gly Asp Phe Cys Ile Gln Val
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 Gly Arg Asn Ile Ile His Gly Ser Asp Ser Val Lys Ser Ala Glu Lys
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 Glu Ile Ser Leu Trp Phe Lys Pro Glu Glu Leu Val Asp Tyr Lys Ser
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